Welcome to STN International! Enter x:x

LOGINID: SSPTANXR1625

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

```
* * * * * * * * * *
                     Welcome to STN International
                 Web Page for STN Seminar Schedule - N. America
NEWS
         JAN 02
NEWS
                 STN pricing information for 2008 now available
NEWS
         JAN 16
                 CAS patent coverage enhanced to include exemplified
                 prophetic substances
NEWS
         JAN 28
                 USPATFULL, USPAT2, and USPATOLD enhanced with new
                 custom IPC display formats
NEWS
         JAN 28
                 MARPAT searching enhanced
NEWS
         JAN 28
                 USGENE now provides USPTO sequence data within 3 days
                 of publication
NEWS
         JAN 28
                 TOXCENTER enhanced with reloaded MEDLINE segment
NEWS 8
         JAN 28
                 MEDLINE and LMEDLINE reloaded with enhancements
NEWS 9
         FEB 08
                 STN Express, Version 8.3, now available
NEWS 10 FEB 20
                 PCI now available as a replacement to DPCI
NEWS 11 FEB 25
                 IFIREF reloaded with enhancements
NEWS 12 FEB 25
                 IMSPRODUCT reloaded with enhancements
NEWS 13 FEB 29
                 WPINDEX/WPIDS/WPIX enhanced with ECLA and current
                 U.S. National Patent Classification
                 IFICDB, IFIPAT, and IFIUDB enhanced with new custom
NEWS 14
         MAR 31
                 IPC display formats
NEWS 15
         MAR 31
                 CAS REGISTRY enhanced with additional experimental
NEWS 16
                 CA/CAplus and CASREACT patent number format for U.S.
         MAR 31
                 applications updated
NEWS 17
         MAR 31
                 LPCI now available as a replacement to LDPCI
NEWS 18
         MAR 31
                 EMBASE, EMBAL, and LEMBASE reloaded with enhancements
NEWS 19
         APR 04
                 STN AnaVist, Version 1, to be discontinued
NEWS 20 APR 15
                 WPIDS, WPINDEX, and WPIX enhanced with new
                 predefined hit display formats
NEWS 21 APR 28
                 EMBASE Controlled Term thesaurus enhanced
NEWS 22 APR 28
                 IMSRESEARCH reloaded with enhancements
NEWS 23 MAY 30
                 INPAFAMDB now available on STN for patent family
                 searching
NEWS 24
         MAY 30
                 DGENE, PCTGEN, and USGENE enhanced with new homology
                 sequence search option
NEWS 25
         JUN 06
                 EPFULL enhanced with 260,000 English abstracts
NEWS 26
         JUN 06
                 KOREAPAT updated with 41,000 documents
NEWS 27
         JUN 13
                 USPATFULL and USPAT2 updated with 11-character
                 patent numbers for U.S. applications
NEWS 28
         JUN 19
                 CAS REGISTRY includes selected substances from
                 web-based collections
NEWS 29
         JUN 25
                 CA/CAplus and USPAT databases updated with IPC
                 reclassification data
NEWS 30
         JUN 30
                 AEROSPACE enhanced with more than 1 million U.S.
                 patent records
NEWS 31
         JUN 30
                 EMBASE, EMBAL, and LEMBASE updated with additional
                 options to display authors and affiliated
```

organizations

NEWS 32 JUN 30 STN on the Web enhanced with new STN AnaVist Assistant and BLAST plug-in

NEWS 33 JUN 30 STN AnaVist enhanced with database content from EPFULL

NEWS EXPRESS JUNE 27 08 CURRENT WINDOWS VERSION IS V8.3, AND CURRENT DISCOVER FILE IS DATED 23 JUNE 2008.

NEWS HOURS STN Operating Hours Plus Help Desk Availability

NEWS LOGIN Welcome Banner and News Items

NEWS IPC8 For general information regarding STN implementation of IPC 8

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

FILE 'HOME' ENTERED AT 08:45:26 ON 01 JUL 2008

=> file reg
COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 0.21 0.21

FULL ESTIMATED COST

FILE 'REGISTRY' ENTERED AT 08:45:58 ON 01 JUL 2008
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2008 American Chemical Society (ACS)

Property values tagged with IC are from the ${\tt ZIC/VINITI}$ data file provided by InfoChem.

STRUCTURE FILE UPDATES: 30 JUN 2008 HIGHEST RN 1031926-83-6 DICTIONARY FILE UPDATES: 30 JUN 2008 HIGHEST RN 1031926-83-6

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH January 9, 2008.

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=>

Uploading C:\Program Files\Stnexp\Queries\10599444.str

```
chain nodes :
7 8 9 17 18 19 21 22 23
ring nodes :
1 2 3 4 5 6 11 12 13 14 15 16
chain bonds :
1-9 \quad 6-7 \quad 7-8 \quad 9-11 \quad 12-17 \quad 13-18 \quad 14-19 \quad 15-21 \quad 21-22 \quad 21-23
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6 11-12 11-16 12-13 13-14 14-15 15-16
exact/norm bonds :
1-9 7-8 9-11 12-17 13-18 14-19 21-22 21-23
exact bonds :
6-7 11-12 11-16 12-13 13-14 14-15 15-16 15-21
normalized bonds :
1-2 1-6 2-3 3-4 4-5 5-6
isolated ring systems :
containing 1 : 11 :
```

Match level:

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:Atom 9:CLASS 11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:CLASS 18:CLASS 19:CLASS 21:CLASS 22:CLASS 23:CLASS

L1STRUCTURE UPLOADED

=> d 11

L1 HAS NO ANSWERS

STR

G1 H, F, Ak

Structure attributes must be viewed using STN Express query preparation.

=> s 11

SAMPLE SEARCH INITIATED 08:46:17 FILE 'REGISTRY' SAMPLE SCREEN SEARCH COMPLETED - 7264 TO ITERATE

27.5% PROCESSED 2000 ITERATIONS INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED) 7 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE** PROJECTED ITERATIONS: 140171 TO 150389 206 TO PROJECTED ANSWERS: 810

L2 7 SEA SSS SAM L1

=> d scan

L2 7 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN IN $\beta\text{-D-Glucopyranoside, 2-[(3-chloro-4-methylphenyl)methyl]phenyl MF C20 H23 Cl O6$

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

=> s 11 full FULL SEARCH INITIATED 08:47:15 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED - 147250 TO ITERATE

100.0% PROCESSED 147250 ITERATIONS

320 ANSWERS

SEARCH TIME: 00.00.03

L3 320 SEA SSS FUL L1

=> file caplus
COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 178.82 179.03

FULL ESTIMATED COST

FILE 'CAPLUS' ENTERED AT 08:47:22 ON 01 JUL 2008
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 1 Jul 2008 VOL 149 ISS 1 FILE LAST UPDATED: 30 Jun 2008 (20080630/ED)

Caplus now includes complete International Patent Classification (IPC) reclassification data for the second quarter of 2008.

Effective October 17, 2005, revised CAS Information Use Policies apply. They are available for your review at:

http://www.cas.org/legal/infopolicy.html

=> s 13 full L4 56 L3

=> d ibib abs hitstr tot

L4 ANSWER 1 OF 56 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2008:467436 CAPLUS

DOCUMENT NUMBER: 148:491048

TITLE: Itosides J-N from Itoa orientalis and

Structure-Anti-COX-2 Activity Relationship of Phenolic

Glycosides

AUTHOR(S): Chai, Xing Yun; Song, Yue Lin; Xu, Zheng Ren; Shi, Hai

Ming; Bai, Chang Cai; Bi, Dan; Wen, Jing; Li, Fei Fei;

Tu, Peng Fei

CORPORATE SOURCE: Department of Natural Medicines, School of

Pharmaceutical Sciences, Peking University Health Science Center, Beijing, 100083, Peop. Rep. China Journal of Natural Products (2008), 71(5), 814-819

CODEN: JNPRDF; ISSN: 0163-3864

PUBLISHER: American Chemical Society-American Society of

Pharmacognosy

DOCUMENT TYPE: Journal LANGUAGE: English

SOURCE:

AB Two new phenolic glycosides, itosides J (1) and K (2), two new cylcohexenoyl glycosides, itosides L (3) and M (4), a new flavone glycoside, itoside N (5), and echitin (6) were isolated from the extract of the bark, twigs, and leaves of Itoa orientalis, together with 22 known compds. The structures were elucidated by means of UV, IR, MS, and NMR techniques, and the relative configuration of compound 3 was confirmed by X-ray crystallog. NMR data for 6 are reported for the first time. Compds. 1, 3, 5, and phenolic glycosides 7-22 were also assayed for anti-inflammatory activity against COX-2. Compds. 8, 10, 12-14, 16, 19, 24, 26, and 27 showed significant inhibitory effects, with inhibitory rates of 49.7-85.3% at 10 $\mu \rm M$.

IT 1016275-80-1P, Itoside K

RL: BSU (Biological study, unclassified); NPO (Natural product occurrence); PRP (Properties); PUR (Purification or recovery); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation)

(itosides from Itoa orientalis and COX-2 inhibitory activity of phenolic glycosides)

RN 1016275-80-1 CAPLUS

CN β -D-Glucopyranoside, 2-[[2-(β -D-glucopyranosyloxy)-5-hydroxy-4-(hydroxymethyl)phenyl]methyl]-4-hydroxyphenyl (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

REFERENCE COUNT: 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 2 OF 56 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2008:282014 CAPLUS

DOCUMENT NUMBER: 148:487088

TITLE: Inhibitor binding in the human renal low- and

high-affinity Na+/glucose cotransporters

AUTHOR(S): Pajor, Ana M.; Randolph, Kathleen M.; Kerner, Sandy

A.; Smith, Chari D.

CORPORATE SOURCE: Department of Biochemistry and Molecular Biology,

University of Texas Medical Branch, Galveston, TX, USA

SOURCE: Journal of Pharmacology and Experimental Therapeutics

(2008), 324(3), 985-991

CODEN: JPETAB; ISSN: 0022-3565

PUBLISHER: American Society for Pharmacology and Experimental

Therapeutics

DOCUMENT TYPE: Journal LANGUAGE: English

The kidney contains two Na+/glucose cotransporters, called SGLT2 and AΒ SGLT1, arranged in series along the length of the proximal tubule. The low-affinity transporter, SGLT2, is responsible for the resorption of most of the glucose in the kidney. There is recent interest in SGLT2 as a target for the treatment of type II diabetes using selective inhibitors based on the structure of the phenylglucoside, phlorizin (phloretin-2'- β -glucoside). In this study, we examined the inhibition of α -methyl-D-glucopyranose transport by phlorizin and a new candidate drug, sergliflozin-A [(2-[4-methoxyphenyl]methyl)phenyl β -D-glucopyranoside], in COS-7 cells expressing hSGLT1 and hSGLT2. Inhibition by phlorizin was competitive, with Ki values of 0.3 μM in hSGLT1 and 39 nM in hSGLT2. Inhibition by sergliflozin-A was also competitive, with Ki values of 1 μM in hSGLT1 and 20 nM in hSGLT2. Phloretin [3-(4-hydroxypheny1)-1-(2,4,6-trihydroxypheny1)-1-propanone; theaglucone of phlorizin] was a less potent inhibitor, with IC50 values of 142 μM in hSGLT1 and 25 μM in hSGLT2. Site-directed mutagenesis of residues believed to be in the phlorizin binding site showed that only Cys610 is involved in inhibitor binding in the human transporters. Mutation of Cys610 in hSGLT1 to lysine resulted in an increased IC50 for all inhibitors. In contrast, mutagenesis of the analogous Cys615 in hSGLT2 produced the opposite effect, a decrease in IC50 for phlorizin and sergliflozin-A. The differences in the effects of the mutations between hSGLT1 and hSGLT2 suggest that this cysteine holds key residues in place rather than participating directly in inhibitor binding.

IT 360775-96-8, Sergliflozin A

RL: PAC (Pharmacological activity); BIOL (Biological study) (inhibitor binding in the human renal low- and high-affinity sodium/glucose cotransporters)

RN 360775-96-8 CAPLUS

CN β -D-Glucopyranoside, 2-[(4-methoxyphenyl)methyl]phenyl (CA INDEX NAME)

REFERENCE COUNT:

36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 3 OF 56 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2008:160806 CAPLUS

DOCUMENT NUMBER: 148:239450

TITLE: Preparation of benzylphenyl glucopyranoside

derivatives as SGLT1 and/or SGLT2 inhibitors
Honda, Takeshi; Oguchi, Minoru; Yoshida, Masao;

INVENTOR(S): Honda, Takeshi; Oguchi, Minoru; Yoshida, Masao; Okuyama, Ryo; Ogata, Tsuneaki; Abe, Manabu; Ueda,

Kenjiro; Ohsumi, Jun; Izumi, Masanori

PATENT ASSIGNEE(S): Daiichi Sankyo Company, Limited, Japan

SOURCE: PCT Int. Appl., 270pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.			KIND DATE			APPLICATION NO.					DATE						
WO 2008016132			A1 20080207			,	WO 2007-JP65231				20070803						
	W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BH,	BR,	BW,	BY,	BZ,	CA,
		CH,	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DO,	DZ,	EC,	EE,	EG,	ES,	FI,
		GB,	GD,	GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,
		KM,	KN,	KP,	KR,	KΖ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LY,	MA,	MD,	ME,
		MG,	MK,	MN,	MW,	MX,	MY,	MZ,	NA,	NG,	NΙ,	NO,	NZ,	OM,	PG,	PH,	PL,
		PT,	RO,	RS,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	SV,	SY,	ΤJ,	TM,	TN,
		TR,	TT,	TZ,	UA,	UG,	US,	UΖ,	VC,	VN,	ZA,	ZM,	ZW				
	RW:	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FΙ,	FR,	GB,	GR,	HU,	IE,
		IS,	ΙΤ,	LT,	LU,	LV,	MC,	MT,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,
		ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	\mathtt{ML} ,	MR,	ΝE,	SN,	TD,	ΤG,	BW,
		GH,	GM,	KΕ,	LS,	MW,	MZ,	NΑ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	ΑM,	ΑZ,
		BY,	KG,	KΖ,	MD,	RU,	ТJ,	TM									
ADTTV ADDINI TNEO .										TD O	$\alpha \alpha c$	2126	$\cap \cap$		Λ Ω	$\alpha \alpha c \alpha$	0.04

PRIORITY APPLN. INFO.: JP 2006-213600 A 20060804

OTHER SOURCE(S): MARPAT 148:239450

GI

AB Title compds. I [R1 = H, amino, alkyl, etc.; R2 = H, halo or alkyl; R3 = alkyl, hydroxyalkyl, alkoxy, etc.; R4 = H, alkyl, acyl, etc.; R5-R8 = H or alkyl with the proviso that R5-R8 cannot be H simultaneously; R9 = halo; n = 0-4; X = CH or N] or pharmacol. acceptable salts were prepared Thus, a multi-step synthesis of compound II, starting from benzyl 2,3,4-tri-O-benzyl- β -D-glucopyranoside, was given. In sodium-dependent glucose transporter inhibition assays, the exemplified compound II exhibited the IC50 values (nM) of 54 and 9.4 for hSGLT1 and hSGLT2, resp.,. Compds. I are claimed useful for the treatment of diabetes, hyperlipidemia, etc.

ΙI

IT 1005484-94-5P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(preparation of benzylphenyl glucopyranoside derivs. as SGLT1 and/or SGLT2 inhibitors for treatment of diabetes, hyperlipidemia, etc.)

RN 1005484-94-5 CAPLUS

CN D-glycero- β -D-gluco-Heptopyranoside, 5-(2-hydroxyethyl)-2-[(4-methoxyphenyl)methyl]phenyl 7-deoxy- (CA INDEX NAME)

```
1005484-43-4P 1005484-44-5P 1005484-45-6P
     1005484-46-7P 1005484-47-8P 1005484-48-9P
     1005484-50-3P 1005484-51-4P 1005484-53-6P
     1005484-54-7P 1005484-55-8P 1005484-56-9P
     1005484-57-0P 1005484-58-1P 1005484-59-2P
     1005484-60-5P 1005484-61-6P 1005484-62-7P
     1005484-63-8P 1005484-64-9P 1005484-65-0P
     1005484-66-1P 1005484-68-3P 1005484-69-4P
     1005484-70-7P 1005484-71-8P 1005484-72-9P
     1005484-73-0P 1005484-74-1P 1005484-75-2P
     1005484-76-3P 1005484-77-4P 1005484-78-5P
     1005484-79-6P 1005484-80-9P 1005484-81-0P
     1005484-82-1P 1005484-83-2P 1005484-84-3P
     1005484-85-4P 1005484-86-5P 1005484-87-6P
     1005484-88-7P 1005484-89-8P 1005484-90-1P
     1005484-91-2P 1005484-92-3P 1005484-93-4P
     1005484-95-6P 1005484-96-7P 1005484-97-8P
     1005484-98-9P 1005484-99-0P 1005485-00-6P
     1005485-02-8P 1005485-03-9P 1005485-04-0P
     1005485-05-1P 1005485-06-2P 1005485-07-3P
     1005485-08-4P 1005485-09-5P 1005485-10-8P
     1005485-11-9P 1005485-12-0P 1005485-13-1P
     1005485-14-2P 1005485-15-3P 1005485-16-4P
     1005485-17-5P 1005485-18-6P 1005485-19-7P
     1005485-20-0P 1005485-21-1P 1005485-22-2P
     1005485-26-6P 1005485-27-7P 1005485-33-5P
     1005495-30-6P
     RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
     (Uses)
        (preparation of benzylphenyl glucopyranoside derivs. as SGLT1 and/or SGLT2
        inhibitors for treatment of diabetes, hyperlipidemia, etc.)
RN
     1005484-40-1 CAPLUS
CN
     D-glycero-\beta-D-gluco-Heptopyranoside, 2-[(4-
     methoxyphenyl)methyl]phenyl 7-deoxy- (CA INDEX NAME)
```

RN 1005484-41-2 CAPLUS

CN L-glycero- β -D-gluco-Heptopyranoside, 5-amino-2-[(4-ethylphenyl)methyl]phenyl 7-deoxy- (CA INDEX NAME)

Absolute stereochemistry.

RN 1005484-42-3 CAPLUS

CN D-glycero- β -D-gluco-Heptopyranoside, 5-amino-2-[(4-ethylphenyl)methyl]phenyl 7-deoxy- (CA INDEX NAME)

Absolute stereochemistry.

1005484-43-4 CAPLUS

RN

CN β -D-Glucopyranoside, 5-amino-2-[(4-ethylphenyl)methyl]phenyl 5-C-methyl- (CA INDEX NAME)

Absolute stereochemistry.

RN 1005484-44-5 CAPLUS

CN D-glycero- β -D-gluco-Heptopyranoside, 5-amino-2-[(4-ethylphenyl)methyl]phenyl 7-deoxy-4-C-methyl- (CA INDEX NAME)

Absolute stereochemistry.

RN 1005484-45-6 CAPLUS

CN D-glycero- β -D-gluco-Heptopyranoside, 5-amino-2-[(4-methoxyphenyl)methyl]phenyl 7-deoxy- (CA INDEX NAME)

RN 1005484-46-7 CAPLUS

CN L-glycero- β -D-gluco-Heptopyranoside, 5-amino-2-[(4-methoxyphenyl)methyl]phenyl 7-deoxy- (CA INDEX NAME)

Absolute stereochemistry.

RN 1005484-47-8 CAPLUS

CN β -D-Glucopyranoside, 5-amino-2-[(4-methoxyphenyl)methyl]phenyl 5-C-methyl- (CA INDEX NAME)

Absolute stereochemistry.

RN 1005484-48-9 CAPLUS

CN D-glycero- β -D-gluco-Heptopyranoside, 2-[(4-ethylphenyl)methyl]-5- (methylamino)phenyl 7-deoxy- (CA INDEX NAME)

Absolute stereochemistry.

RN 1005484-50-3 CAPLUS

CN D-glycero- β -D-gluco-Heptopyranoside, 2-[(4-methoxyphenyl)methyl]-5-methylphenyl 7-deoxy- (CA INDEX NAME)

Absolute stereochemistry.

RN 1005484-51-4 CAPLUS

CN D-glycero- β -D-gluco-Heptopyranoside, 2-[(4-ethylphenyl)methyl]-3,5-dimethylphenyl 7-deoxy- (CA INDEX NAME)

RN 1005484-53-6 CAPLUS

CN D-glycero- β -D-gluco-Heptopyranoside, 2-[(4-ethylphenyl)methyl]-5-(hydroxymethyl)phenyl 7-deoxy- (CA INDEX NAME)

Absolute stereochemistry.

RN 1005484-54-7 CAPLUS

CN L-glycero- β -D-gluco-Heptopyranoside, 2-[(4-ethylphenyl)methyl]-5- (hydroxymethyl)phenyl 7-deoxy- (CA INDEX NAME)

Absolute stereochemistry.

RN 1005484-55-8 CAPLUS

CN β -D-Glucopyranoside, 2-[(4-ethylphenyl)methyl]-5- (hydroxymethyl)phenyl 5-C-methyl- (CA INDEX NAME)

Absolute stereochemistry.

RN 1005484-56-9 CAPLUS

CN β -D-Glucopyranoside, 2-[(4-ethylphenyl)methyl]-5- (hydroxymethyl)phenyl 4-C-methyl- (CA INDEX NAME)

Absolute stereochemistry.

RN 1005484-57-0 CAPLUS

CN β -D-Glucopyranoside, 2-[(4-ethylphenyl)methyl]-5- (hydroxymethyl)phenyl 4-C-methyl-, 6-acetate (CA INDEX NAME)

RN 1005484-58-1 CAPLUS

CN β -D-Glucopyranoside, 2-[(4-ethylphenyl)methyl]-5- (hydroxymethyl)phenyl 5-C-methyl-, 6-(2-hydroxyacetate) (CA INDEX NAME)

Absolute stereochemistry.

RN 1005484-59-2 CAPLUS

CN β -D-Glucopyranoside, 2-[(4-ethylphenyl)methyl]-5- (hydroxymethyl)phenyl 4-C-methyl-, 6-(2-hydroxyacetate) (CA INDEX NAME)

RN 1005484-60-5 CAPLUS

CN D-glycero- β -D-gluco-Heptopyranoside, 5-(hydroxymethyl)-2-[(4-methoxyphenyl)methyl]phenyl 7-deoxy- (CA INDEX NAME)

Absolute stereochemistry.

RN 1005484-61-6 CAPLUS

CN L-glycero- β -D-gluco-Heptopyranoside, 5-(hydroxymethyl)-2-[(4-methoxyphenyl)methyl]phenyl 7-deoxy- (CA INDEX NAME)

RN 1005484-62-7 CAPLUS

CN β -D-xylo-Hexopyranosid-4-ulose, 5-(hydroxymethyl)-2-[(4-methoxyphenyl)methyl]phenyl, methyl hemiacetal, 6-(2-hydroxyacetate) (CA INDEX NAME)

Absolute stereochemistry.

RN 1005484-63-8 CAPLUS

CN D-glycero- β -D-gluco-Heptopyranoside, 5-(hydroxymethyl)-2-[[4-(trifluoromethoxy)phenyl]methyl]phenyl 7-deoxy- (CA INDEX NAME)

RN 1005484-64-9 CAPLUS

CN L-glycero- β -D-gluco-Heptopyranoside, 5-[(acetyloxy)methyl]-2-[(4-ethylphenyl)methyl]phenyl 7-deoxy- (CA INDEX NAME)

Absolute stereochemistry.

RN 1005484-65-0 CAPLUS

CN D-glycero- β -D-gluco-Heptopyranoside, 5-[[(2-hydroxyacetyl)oxy]methyl]-2-[(4-methoxyphenyl)methyl]phenyl 7-deoxy- (CA INDEX NAME)

Absolute stereochemistry.

RN 1005484-66-1 CAPLUS

CN Acetamide, 2-[[3-[(7-deoxy-D-glycero- β -D-gluco-heptopyranosyl)oxy]-4-[(4-ethylphenyl)methyl]phenyl]amino]- (CA INDEX NAME)

RN 1005484-68-3 CAPLUS

CN D-glycero- β -D-gluco-Heptopyranoside, 2-[(4-ethylphenyl)methyl]-5- (hydroxymethyl)phenyl 7-deoxy-4-C-methyl- (CA INDEX NAME)

Absolute stereochemistry.

RN 1005484-69-4 CAPLUS

CN D-glycero- β -D-gluco-Heptopyranoside, 5-(hydroxymethyl)-2-[(4-methoxyphenyl)methyl]phenyl 7-deoxy-4-C-methyl- (CA INDEX NAME)

Absolute stereochemistry.

1005484-70-7 CAPLUS

RN

CN D-glycero- β -D-gluco-Heptopyranoside, 3-chloro-2-[(4-methoxyphenyl)methyl]phenyl 7-deoxy- (CA INDEX NAME)

Absolute stereochemistry.

RN 1005484-71-8 CAPLUS

CN D-glycero- β -D-gluco-Heptopyranoside, 3-chloro-2-[(4-methoxyphenyl)methyl]-5-methylphenyl 7-deoxy- (CA INDEX NAME)

Absolute stereochemistry.

RN 1005484-72-9 CAPLUS

CN D-glycero- β -D-gluco-Heptopyranoside, 3-chloro-5-(hydroxymethyl)-2-[(4-methoxyphenyl)methyl]phenyl 7-deoxy- (CA INDEX NAME)

RN 1005484-73-0 CAPLUS

CN D-glycero- β -D-gluco-Heptopyranoside, 3-chloro-2-[(4-ethoxyphenyl)methyl]-5-(hydroxymethyl)phenyl 7-deoxy- (CA INDEX NAME)

Absolute stereochemistry.

RN 1005484-74-1 CAPLUS

CN D-glycero- β -D-gluco-Heptopyranoside, 2-[(4-ethoxyphenyl)methyl]-3-fluoro-5-(hydroxymethyl)phenyl 7-deoxy- (CA INDEX NAME)

Absolute stereochemistry.

1005484-75-2 CAPLUS

RN

CN D-glycero- β -D-gluco-Heptopyranoside, 2-[(4-ethylphenyl)methyl]-3-fluoro-5-(hydroxymethyl)phenyl 7-deoxy- (CA INDEX NAME)

Absolute stereochemistry.

RN 1005484-76-3 CAPLUS

CN D-glycero- β -D-gluco-Heptopyranoside, 2-[(4-ethylphenyl)methyl]-3-fluoro-5-(hydroxymethyl)phenyl 7-deoxy-4-C-methyl- (CA INDEX NAME)

Absolute stereochemistry.

RN 1005484-77-4 CAPLUS

CN β -D-Glucopyranoside, 2-[(4-methoxyphenyl)methyl]phenyl 4-C-methyl-(CA INDEX NAME)

RN 1005484-78-5 CAPLUS

CN D-glycero- β -D-gluco-Heptopyranoside, 2-[(4-methoxyphenyl)methyl]phenyl 7-deoxy-5-C-methyl- (CA INDEX NAME)

Absolute stereochemistry.

RN 1005484-79-6 CAPLUS

CN L-glycero- β -D-gluco-Heptopyranoside, 2-[(4-methoxyphenyl)methyl]phenyl 7-deoxy- (CA INDEX NAME)

Absolute stereochemistry.

RN 1005484-80-9 CAPLUS

CN D-glycero- β -D-gluco-Heptopyranoside, 2-[[4-(2-hydroxyethy1)pheny1]methy1]-5-(hydroxymethy1)pheny1 7-deoxy- (CA INDEX NAME)

Absolute stereochemistry.

RN 1005484-81-0 CAPLUS

CN D-glycero- β -D-gluco-Heptopyranoside, 2-[[4-(4-hydroxy-1-piperidinyl)phenyl]methyl]phenyl 7-deoxy- (CA INDEX NAME)

Absolute stereochemistry.

RN 1005484-82-1 CAPLUS

CN β -D-Glucopyranoside, 3-chloro-5-(hydroxymethyl)-2-[(4-methoxyphenyl)methyl]phenyl 5-C-methyl- (CA INDEX NAME)

RN 1005484-83-2 CAPLUS

CN β -D-Glucopyranoside, 3-chloro-5-(hydroxymethyl)-2-[(4-methoxyphenyl)methyl]phenyl 4-C-methyl- (CA INDEX NAME)

Absolute stereochemistry.

RN 1005484-84-3 CAPLUS

CN L-glycero- β -D-gluco-Heptopyranoside, 3-chloro-5-(hydroxymethyl)-2-[(4-methoxyphenyl)methyl]phenyl 7-deoxy- (CA INDEX NAME)

Absolute stereochemistry.

RN 1005484-85-4 CAPLUS

CN D-glycero- β -D-gluco-Heptopyranoside, 5-(hydroxymethyl)-2-[[4-(methoxymethyl)phenyl]methyl]phenyl 7-deoxy- (CA INDEX NAME)

Absolute stereochemistry.

RN 1005484-86-5 CAPLUS

CN D-glycero- β -D-gluco-Heptopyranoside, 2-[[4- (cyclopropyloxy)phenyl]methyl]-5-(hydroxymethyl)phenyl 7-deoxy- (CA INDEX NAME)

Absolute stereochemistry.

RN 1005484-87-6 CAPLUS

CN Ethanone, $1-[4-[[2-[[7-deoxy-D-glycero-\beta-D-gluco-heptopyranosyl]oxy]-4-(hydroxymethyl)phenyl]methyl]phenyl]- (CA INDEX NAME)$

RN 1005484-88-7 CAPLUS

CN β -D-Glucopyranoside, 5-amino-2-[(4-methoxyphenyl)methyl]phenyl 4-C-methyl- (CA INDEX NAME)

Absolute stereochemistry.

RN 1005484-89-8 CAPLUS

CN D-glycero- β -D-gluco-Heptopyranoside, 5-(hydroxymethyl)-2-[[4-(methylthio)phenyl]methyl]phenyl 7-deoxy- (CA INDEX NAME)

Absolute stereochemistry.

1005484-90-1 CAPLUS

RN

CN D-glycero- β -D-gluco-Heptopyranoside, 2-[(4-ethylphenyl)methyl]-5-(2-hydroxyethyl)phenyl 7-deoxy- (CA INDEX NAME)

Absolute stereochemistry.

RN 1005484-91-2 CAPLUS

CN D-glycero- β -D-gluco-Heptopyranoside, 5-(hydroxymethyl)-2-[[4-(3-hydroxypropyl)phenyl]methyl]phenyl 7-deoxy- (CA INDEX NAME)

Absolute stereochemistry.

RN 1005484-92-3 CAPLUS

CN D-glycero- β -D-gluco-Heptopyranoside, 2-[(3-fluoro-4-methoxyphenyl)methyl]-3,5-dimethylphenyl 7-deoxy- (CA INDEX NAME)

RN 1005484-93-4 CAPLUS

CN D-glycero- β -D-gluco-Heptopyranoside, 2-[[4-(2-hydroxyethyl)phenyl]methyl]-3,5-dimethylphenyl 7-deoxy- (CA INDEX NAME)

Absolute stereochemistry.

RN 1005484-95-6 CAPLUS

CN Benzaldehyde, 3-[[7-deoxy-D-glycero- β -D-gluco-heptopyranosyl]oxy]-4-[(4-methoxyphenyl)methyl]-, oxime (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry unknown.

RN 1005484-96-7 CAPLUS

CN D-glycero- β -D-gluco-Heptopyranoside, 5-(1-hydroxyethyl)-2-[(4-methoxyphenyl)methyl]phenyl 7-deoxy- (CA INDEX NAME)

Absolute stereochemistry.

RN 1005484-97-8 CAPLUS

CN D-glycero- β -D-gluco-Heptopyranoside, 3-fluoro-5-(hydroxymethyl)-2-[(4-propoxyphenyl)methyl]phenyl 7-deoxy- (CA INDEX NAME)

Absolute stereochemistry.

1005484-98-9 CAPLUS

RN

CN D-glycero- β -D-gluco-Heptopyranoside, 3-fluoro-5-(hydroxymethyl)-2-[[4-(1-methylethoxy)phenyl]methyl]phenyl 7-deoxy- (CA INDEX NAME)

Absolute stereochemistry.

RN 1005484-99-0 CAPLUS

CN D-glycero- β -D-gluco-Heptopyranoside, 2-[(4-ethoxyphenyl)methyl]-5-(hydroxymethyl)phenyl 7-deoxy- (CA INDEX NAME)

Absolute stereochemistry.

RN 1005485-00-6 CAPLUS

CN D-glycero- β -D-gluco-Heptopyranoside, 2-[(4-methoxyphenyl)methyl]-3,5-dimethylphenyl 7-deoxy- (CA INDEX NAME)

RN 1005485-02-8 CAPLUS

CN D-glycero- β -D-gluco-Heptopyranoside, 2-[(3-fluoro-4-methoxyphenyl)methyl]-5-(hydroxymethyl)phenyl 7-deoxy- (CA INDEX NAME)

Absolute stereochemistry.

RN 1005485-03-9 CAPLUS

CN D-glycero- β -D-gluco-Heptopyranoside, 2-[(4-fluorophenyl)methyl]-5- (hydroxymethyl)phenyl 7-deoxy- (CA INDEX NAME)

RN 1005485-04-0 CAPLUS

CN D-glycero- β -D-gluco-Heptopyranoside, 5-(hydroxymethyl)-2-[[4-(hydroxymethyl)phenyl]methyl]phenyl 7-deoxy- (CA INDEX NAME)

Absolute stereochemistry.

RN 1005485-05-1 CAPLUS

CN D-glycero- β -D-gluco-Heptopyranoside, 5-(hydroxymethyl)-2-[[4-(1-methylethoxy)phenyl]methyl]phenyl 7-deoxy- (CA INDEX NAME)

Absolute stereochemistry.

RN 1005485-06-2 CAPLUS

CN D-glycero- β -D-gluco-Heptopyranoside, 2-[(2-fluoro-4-methoxyphenyl)methyl]-5-(hydroxymethyl)phenyl 7-deoxy- (CA INDEX NAME)

RN 1005485-07-3 CAPLUS

CN D-glycero- β -D-gluco-Heptopyranoside, 5-(hydroxymethyl)-3-methoxy-2-[(4-methoxyphenyl)methyl]phenyl 7-deoxy- (CA INDEX NAME)

Absolute stereochemistry.

RN 1005485-08-4 CAPLUS

CN D-glycero- β -D-gluco-Heptopyranoside, 3-fluoro-5-(hydroxymethyl)-2-[(4-methoxyphenyl)methyl]phenyl 7-deoxy- (CA INDEX NAME)

Absolute stereochemistry.

RN 1005485-09-5 CAPLUS

CN D-glycero- β -D-gluco-Heptopyranoside, 5-[[(2-hydroxyacetyl)oxy]methyl]-2-[[4-(1-methylethoxy)phenyl]methyl]phenyl 7-deoxy- (CA INDEX NAME)

Absolute stereochemistry.

RN 1005485-10-8 CAPLUS

CN D-glycero- β -D-gluco-Heptopyranoside, 2-[(4-cyclopropylphenyl)methyl]-3-fluoro-5-(hydroxymethyl)phenyl 7-deoxy- (CA INDEX NAME)

Absolute stereochemistry.

RN 1005485-11-9 CAPLUS

CN D-glycero- β -D-gluco-Heptopyranoside, 2-[(4-ethylphenyl)methyl]-5- (hydroxymethyl)-3-methylphenyl 7-deoxy- (CA INDEX NAME)

RN 1005485-12-0 CAPLUS

CN D-glycero- β -D-gluco-Heptopyranoside, 3-chloro-5-(hydroxymethyl)-2-[(4-methoxyphenyl)methyl]phenyl 7-deoxy-4-C-methyl- (CA INDEX NAME)

Absolute stereochemistry.

RN 1005485-13-1 CAPLUS

CN D-glycero- β -D-gluco-Heptopyranoside, 3-fluoro-5-(hydroxymethyl)-2-[(4-methoxyphenyl)methyl]phenyl 7-deoxy-4-C-methyl- (CA INDEX NAME)

Absolute stereochemistry.

1005485-14-2 CAPLUS

RN

CN D-glycero- β -D-gluco-Heptopyranoside, 3-fluoro-5-[[(2-hydroxyacetyl)oxy]methyl]-2-[(4-methoxyphenyl)methyl]phenyl 7-deoxy-4-C-methyl- (CA INDEX NAME)

Absolute stereochemistry.

RN 1005485-15-3 CAPLUS

CN D-glycero- β -D-gluco-Heptopyranoside, 5-(hydroxymethyl)-2-[(4-methoxyphenyl)methyl]-3-methylphenyl 7-deoxy- (CA INDEX NAME)

Absolute stereochemistry.

RN 1005485-16-4 CAPLUS

CN D-glycero- β -D-gluco-Heptopyranoside, 3-chloro-2-[[4- (cyclopropyloxy)phenyl]methyl]-5-(hydroxymethyl)phenyl 7-deoxy- (CA INDEX NAME)

RN 1005485-17-5 CAPLUS

CN D-glycero- β -D-gluco-Heptopyranoside, 2-[[4- (cyclopropyloxy)phenyl]methyl]-5-(hydroxymethyl)-3-methylphenyl 7-deoxy- (CA INDEX NAME)

Absolute stereochemistry.

RN 1005485-18-6 CAPLUS

CN D-glycero- β -D-gluco-Heptopyranoside, 3-fluoro-5-(hydroxymethyl)-2-[(4-methylphenyl)methyl]phenyl 7-deoxy- (CA INDEX NAME)

RN 1005485-19-7 CAPLUS

CN D-glycero- β -D-gluco-Heptopyranoside, 5-(hydroxymethyl)-2-[(4-methylphenyl)methyl]phenyl 7-deoxy- (CA INDEX NAME)

Absolute stereochemistry.

RN 1005485-20-0 CAPLUS

CN D-glycero- β -D-gluco-Heptopyranoside, 2-[(4-ethoxyphenyl)methyl]-5-[(2-hydroxyacetyl)oxy]methyl]phenyl 7-deoxy- (CA INDEX NAME)

Absolute stereochemistry.

RN 1005485-21-1 CAPLUS

CN Acetic acid, 2-hydroxy-, [3-[(7-deoxy-D-glycero- β -D-gluco-heptopyranosyl)oxy]-4-[(2-fluoro-4-methoxyphenyl)methyl]phenyl]methyl ester (CA INDEX NAME)

RN 1005485-22-2 CAPLUS

CN D-glycero- β -D-gluco-Heptopyranoside, 3-ethenyl-5-(hydroxymethyl)-2-[(4-methoxyphenyl)methyl]phenyl 7-deoxy- (CA INDEX NAME)

Absolute stereochemistry.

RN 1005485-26-6 CAPLUS

CN β -D-Glucopyranoside, 2-[(4-ethylphenyl)methyl]-5- (hydroxymethyl)phenyl 6-O-methyl- (CA INDEX NAME)

Absolute stereochemistry.

1005485-27-7 CAPLUS

RN

CN β -D-Glucopyranoside, 2-[(4-ethylphenyl)methyl]-5- (hydroxymethyl)phenyl, 6-(2-hydroxyacetate) (CA INDEX NAME)

Absolute stereochemistry.

RN 1005485-33-5 CAPLUS

CN D-glycero- β -D-gluco-Heptopyranoside, 2-[(4-cyclopropylphenyl)methyl]-5-(hydroxymethyl)phenyl 7-deoxy- (CA INDEX NAME)

Absolute stereochemistry.

RN 1005495-30-6 CAPLUS

CN D-glycero- β -D-gluco-Heptopyranoside, 2-[[4- (cyclopropyloxy)phenyl]methyl]-3-fluoro-5-(hydroxymethyl)phenyl 7-deoxy- (CA INDEX NAME)

1005486-23-6P 1005486-24-7P 1005486-25-8P ΙT 1005486-27-0P 1005486-28-1P 1005486-29-2P 1005486-30-5P 1005486-32-7P 1005486-33-8P 1005486-78-1P 1005486-91-8P 1005487-00-2P 1005487-06-8P 1005487-52-4P 1005488-65-2P 1005488-83-4P 1005489-08-6P 1005489-20-2P 1005489-30-4P 1005489-31-5P RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation of benzylphenyl glucopyranoside derivs. as SGLT1 and/or SGLT2 inhibitors for treatment of diabetes, hyperlipidemia, etc.) RN 1005486-23-6 CAPLUS CN β -D-Glucopyranoside, 2-[(4-ethylphenyl)methyl]-5-[[(tetrahydro-2Hpyran-2-yl)oxy]methyl]phenyl 4-C-methyl- (CA INDEX NAME)

Absolute stereochemistry.

RN 1005486-24-7 CAPLUS

CN β -D-Glucopyranoside, 2-[(4-ethylphenyl)methyl]-5-[[(tetrahydro-2H-pyran-2-yl)oxy]methyl]phenyl 4-C-methyl-, 6-[2-[(tetrahydro-2H-pyran-2-yl)oxy]acetate] (CA INDEX NAME)

RN 1005486-25-8 CAPLUS

CN β -D-Glucopyranoside, 2-[(4-ethylphenyl)methyl]-5-[[(tetrahydro-2H-pyran-2-yl)oxy]methyl]phenyl 4-C-methyl-, 6-acetate (CA INDEX NAME)

Absolute stereochemistry.

RN 1005486-27-0 CAPLUS

CN β -D-Glucopyranoside, 2-[(4-methoxyphenyl)methyl]-5-[[(tetrahydro-2H-pyran-2-yl)oxy]methyl]phenyl 4-C-methyl- (CA INDEX NAME)

RN 1005486-28-1 CAPLUS

CN β -D-Glucopyranoside, 2-[(4-methoxyphenyl)methyl]-5-[[(tetrahydro-2H-pyran-2-yl)oxy]methyl]phenyl 4-C-methyl-, 6-[2-[(tetrahydro-2H-pyran-2-yl)oxy]acetate] (CA INDEX NAME)

Absolute stereochemistry.

RN 1005486-29-2 CAPLUS

CN D-glycero- β -D-gluco-Heptopyranoside, 5-[(acetyloxy)methyl]-2-[(4-methoxyphenyl)methyl]phenyl 7-deoxy- (CA INDEX NAME)

RN 1005486-30-5 CAPLUS

CN D-glycero- β -D-gluco-Heptopyranoside, 2-[(4-methoxyphenyl)methyl]-5- [[[2-[[(2-propen-1-yloxy)carbonyl]oxy]acetyl]oxy]methyl]phenyl 7-deoxy- (CA INDEX NAME)

Absolute stereochemistry.

RN 1005486-32-7 CAPLUS

CN β -D-Glucopyranoside, 2-[(4-ethylphenyl)methyl]-5-[[(tetrahydro-2H-pyran-2-yl)oxy]methyl]phenyl 5-C-methyl- (CA INDEX NAME)

RN 1005486-33-8 CAPLUS

CN β -D-Glucopyranoside, 2-[(4-ethylphenyl)methyl]-5-[[(tetrahydro-2H-pyran-2-yl)oxy]methyl]phenyl 5-C-methyl-, 6-[2-[(tetrahydro-2H-pyran-2-yl)oxy]acetate] (CA INDEX NAME)

Absolute stereochemistry.

RN 1005486-78-1 CAPLUS

CN D-glycero- β -D-gluco-Heptopyranoside, 5-[(acetyloxy)methyl]-3-chloro-2-[(4-methoxyphenyl)methyl]phenyl 7-deoxy- (CA INDEX NAME)

RN 1005486-91-8 CAPLUS

CN D-glycero- β -D-gluco-Heptopyranoside, 5-[(acetyloxy)methyl]-3-chloro-2-[(4-ethoxyphenyl)methyl]phenyl 7-deoxy- (CA INDEX NAME)

Absolute stereochemistry.

RN 1005487-00-2 CAPLUS

CN D-glycero- β -D-gluco-Heptopyranoside, 5-[(acetyloxy)methyl]-2-[(4-ethoxyphenyl)methyl]-3-fluorophenyl 7-deoxy- (CA INDEX NAME)

Absolute stereochemistry.

RN 1005487-06-8 CAPLUS

CN D-glycero- β -D-gluco-Heptopyranoside, 5-[(acetyloxy)methyl]-2-[(4-ethylphenyl)methyl]-3-fluorophenyl 7-deoxy- (CA INDEX NAME)

Absolute stereochemistry.

RN 1005487-52-4 CAPLUS

CN D-glycero- β -D-gluco-Heptopyranoside, 5-[(acetyloxy)methyl]-2-[[4-(cyclopropyloxy)phenyl]methyl]-3-fluorophenyl 7-deoxy- (CA INDEX NAME)

Absolute stereochemistry.

RN 1005488-65-2 CAPLUS

CN Acetic acid, 2-[[(2-propen-1-yloxy)carbonyl]oxy]-, [3-[(7-deoxy-D-glycero- β -D-gluco-heptopyranosyl)oxy]-4-[(4-propoxyphenyl)methyl]phenyl]methyl ester (CA INDEX NAME)

RN 1005488-83-4 CAPLUS

CN Acetic acid, 2-[[(2-propen-1-yloxy)carbonyl]oxy]-, [3-[(7-deoxy-D-glycero- β -D-gluco-heptopyranosyl)oxy]-5-fluoro-4-[(4-methoxyphenyl)methyl]phenyl]methyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 1005489-08-6 CAPLUS

CN D-glycero- β -D-gluco-Heptopyranoside, 5-[(acetyloxy)methyl]-3-chloro-2-[[4-(cyclopropyloxy)phenyl]methyl]phenyl 7-deoxy- (CA INDEX NAME)

RN 1005489-20-2 CAPLUS

CN D-glycero- β -D-gluco-Heptopyranoside, 5-[(acetyloxy)methyl]-2-[[4-(cyclopropyloxy)phenyl]methyl]-3-methylphenyl 7-deoxy- (CA INDEX NAME)

Absolute stereochemistry.

RN 1005489-30-4 CAPLUS

CN Acetic acid, 2-[[(2-propen-1-yloxy)carbonyl]oxy]-, [3-[(7-deoxy-D-glycero- β -D-gluco-heptopyranosyl)oxy]-4-[(4-ethoxyphenyl)methyl]phenyl]methyl ester (CA INDEX NAME)

RN 1005489-31-5 CAPLUS

CN Acetic acid, 2-[[(2-propen-1-yloxy)carbonyl]oxy]-, $[3-[(7-deoxy-D-glycero-\beta-D-gluco-heptopyranosyl)oxy]-4-[(2-fluoro-4-methoxyphenyl)methyl]methyl ester (CA INDEX NAME)$

Absolute stereochemistry.

REFERENCE COUNT: 51 THERE ARE 51 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 4 OF 56 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2007:1231253 CAPLUS

DOCUMENT NUMBER: 148:229176

TITLE: Mangiferin identified in a screening study guided by

neuraminidase inhibitory activity

AUTHOR(S): Li, Xiaofan; Ohtsuki, Takashi; Shindo, Sayaka; Sato,

Masaaki; Koyano, Takashi; Preeprame, Srisompom;

Kowithayakorn, Thaworn; Ishibashi, Masami

CORPORATE SOURCE: Graduate School of Pharmaceutical Sciences, Chiba

University, Chiba, Japan

SOURCE: Planta Medica (2007), 73(11), 1195-1196

CODEN: PLMEAA; ISSN: 0032-0943

PUBLISHER: Georg Thieme Verlag

DOCUMENT TYPE: Journal LANGUAGE: English

AB A screening study on neuraminidase inhibitory constituents was carried out, and activity-guided fractionations of three plants, Gouania obtusifolia, Zizyphus cambodiana, and Mangifera odorata, led to the isolation of eleven compds. (1-11). Mangiferin was identified as a significant neuraminidase inhibitor.

IT 245447-83-0P

RL: PAC (Pharmacological activity); PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(mangiferin identified in screening study guided by neuraminidase inhibitory activity)

RN 245447-83-0 CAPLUS

CN Methanone, [2-(β -D-glucopyranosyloxy)-4,6-dihydroxyphenyl](4-hydroxyphenyl)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 5 OF 56 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2007:1130752 CAPLUS

DOCUMENT NUMBER: 148:33960

TITLE: Study on the synthesis and bioactivity of novel

mahkoside a derivatives

AUTHOR(S): Zhang, Yan-Bing; Zhang, Pi-Yong; Dai, Gui-Fu; Liu,

Hong-Min

CORPORATE SOURCE: Department of Chemistry, New Drug Research and

Development Center, Zhengzhou University, Zhengzhou,

450052, Peop. Rep. China

SOURCE: Synthetic Communications (2007), 37(19), 3319-3328

CODEN: SYNCAV; ISSN: 0039-7911

PUBLISHER: Taylor & Francis, Inc.

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 148:33960

GΙ

$$\begin{array}{c|c} \text{O} & \text{O} & \text{CH}_2\text{-}\text{CH}_2\text{-}\text{NEt}_2 \\ \\ \text{PhCH}_2\text{O} & \text{MeO} & \text{OCH}_2\text{Ph} & \text{II} \end{array}$$

AB A series of novel Mahkoside A derivs. was synthesized, and their in vitro cytotoxic activities were evaluated against the human cancer cell line Ec-9706. A preliminary structure-activity relationship study showed compds. I and II have obvious cytotoxic activities (IC50: 30.0 and 12.5 $\mu q/mL-1$, resp.).

IT 934281-45-5

RL: PAC (Pharmacological activity); RCT (Reactant); BIOL (Biological study); RACT (Reactant or reagent)

(synthesis and in vitro human antitumor structure activity anal. of mahkoside glycoside analogs)

RN 934281-45-5 CAPLUS

CN Methanone, [2-(β -D-glucopyranosyloxy)-4-hydroxy-6-methoxyphenyl](4-hydroxyphenyl)- (CA INDEX NAME)

IT 959472-39-0P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent)

(synthesis and in vitro human antitumor structure activity anal. of mahkoside glycoside analogs)

RN 959472-39-0 CAPLUS

CN Methanone, $[2-(\beta-D-glucopyranosyloxy)-6-methoxy-4-(phenylmethoxy)phenyl][4-(phenylmethoxy)phenyl]]- (CA INDEX NAME)$

Absolute stereochemistry.

REFERENCE COUNT:

12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 6 OF 56 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2007:990524 CAPLUS

DOCUMENT NUMBER: 148:374517

TITLE: Isolation of chemical constituents from Mahkota dewa AUTHOR(S): Xu, Xiangjun; Zuo, Lingxia; Qi, Weihong; Wang, Wei CORPORATE SOURCE: Yinchuan University, Yinchuan, 750105, Peop. Rep.

China

SOURCE: Huagong Shikan (2006), 20(9), 45-47

CODEN: HUSHFT; ISSN: 1002-154X

PUBLISHER: Huagong Shikan Zazhishe

DOCUMENT TYPE: Journal LANGUAGE: Chinese

AB The chemical constituents on the pit of Mahkota dewa was extracted here. 8 Compds. was achieved from it and they were lauric acid, palmitic acid, Et stearate, β -sitosterol-3-0- β -D-glucoside, 4, 4'-Dihydroxy-2methoxybenzophenone-6-0- β -D-glucopyranoside, kaempferol-3-0- β -D-glucopyranoside, mangiferin and sucrose. Among them, 4,

4'-Dihydroxy-2-methoxybenzophenone-6-0 β -D- glucopyranoside was a new

compound first reported.

IT 934281-45-5

RL: BSU (Biological study, unclassified); NPO (Natural product occurrence); BIOL (Biological study); OCCU (Occurrence) (isolation of chemical constituents from Mahkota dewa)

RN 934281-45-5 CAPLUS

CN Methanone, $[2-(\beta-D-glucopyranosyloxy)-4-hydroxy-6-methoxyphenyl]$ (4-hydroxyphenyl)- (CA INDEX NAME)

L4 ANSWER 7 OF 56 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2007:987514 CAPLUS

DOCUMENT NUMBER: 148:303404

TITLE: Isoquinoline alkaloids from Corydalis taliensis
AUTHOR(S): Wu, Ying-Rui; Zhao, You-Xing; Liu, Yu-Qing; Zhou, Jun

CORPORATE SOURCE: State Key Laboratory of Phytochemistry and Plant

Resources in West China, Kunming Institute of Botany, Chinese Academy of Sciences, Kunming, 650204, Peop.

Rep. China

SOURCE: Zeitschrift fuer Naturforschung, B: Chemical Sciences

(2007), 62(9), 1199-1202

CODEN: ZNBSEN; ISSN: 0932-0776

PUBLISHER: Verlag der Zeitschrift fuer Naturforschung

DOCUMENT TYPE: Journal LANGUAGE: English

AB Corydalis taliensis Franch is a perennial herb used for treatment of rheumatic arthritis, toothache, and hepatitis. The chemical investigation of this plant resulted in the isolation of a new compound, named taliensineside (1). Its structure was identified on the basis of spectral evidence. In addition, thirteen known isoquinoline alkaloids (2-14) were isolated and identified by spectroscopic anal. and comparison of their spectral data with those reported previously.

IT 1009297-50-0P, Taliensineside

RL: NPO (Natural product occurrence); PRP (Properties); PUR (Purification or recovery); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation)

(isoquinoline alkaloids from Corydalis taliensis)

RN 1009297-50-0 CAPLUS

CN β -D-Glucopyranoside, 5-hydroxy-4-methoxy-2-[[(1R)-1,2,3,4-tetrahydro-6-hydroxy-7-methoxy-2-methyl-1-isoquinolinyl]methyl]phenyl (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

REFERENCE COUNT: 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 8 OF 56 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2007:987313 CAPLUS

DOCUMENT NUMBER: 148:280221

TITLE: Determination of the chemical structure of antioxidant

compound benzophenone glycoside from n-butanol extracts of the fruits of Mahkota dewa [Phaleria

macrocarpoa (Scheff) Boerl.]

AUTHOR(S): Tambunan, Risma Marisi; Simanjuntak, Partomuan CORPORATE SOURCE: Fakultas Farmasi, Universitas Pancasila, Indonesia SOURCE: Majalah Farmasi Indonesia (2006), 17(4), 184-189

CODEN: MFINFF; ISSN: 0126-1037

PUBLISHER: Fakultas Farmasi UGM

DOCUMENT TYPE: Journal LANGUAGE: Unavailable

AB In continuing of chemical study research on the parts of the fruits of Mahkota dewa, we have isolated one antioxidant compound benzophenone glycoside from n-butanol extract Isolation and purification by column chromatog.

(SiO2, chloroform-methanol) and determination of chemical structure based on interpretation spectra of UV, IR (IR) and NMR 1 dimension (1H & 13C NMR), 2 dimension (1H-1H COSY, 13C-1H COSY, HMBC). Based on spectroscopic data, the compound was identified as 6,4',-dihydroxy-4- methoxybenzophenone-2-O- α -D-glucopyranoside.

IT 1007385-84-3

RL: BSU (Biological study, unclassified); BIOL (Biological study) (structure of antioxidant compound benzophenone glycoside from fruits of Mahkota dewa)

RN 1007385-84-3 CAPLUS

CN Methanone, [2- $(\alpha$ -D-glucopyranosyloxy)-6-hydroxy-4-methoxyphenyl](4-hydroxyphenyl)- (CA INDEX NAME)

L4 ANSWER 9 OF 56 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2007:814203 CAPLUS

DOCUMENT NUMBER: 147:158495

TITLE: Laxative and food containing the same

INVENTOR(S): Iinuma, Munekazu; Hara, Hideaki; Oyama, Masayoshi PATENT ASSIGNEE(S): Nagoya Industrial Science Research Institute, Japan

SOURCE: PCT Int. Appl., 29pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

P.	PATENT NO.					KIND		DATE		APPLICATION NO.					DATE			
M	WO 2007083594				A1	_	20070726		WO 2007-JP50406					20070115				
	W:	ΑE,	AG,	AL,	ΑM,	ΑT,	ΑU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,	
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FΙ,	GB,	GD,	
		GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	ΚE,	KG,	KM,	KN,	KP,	
		KR,	KΖ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	LY,	MA,	MD,	MG,	MK,	MN,	
		MW,	MX,	MY,	MZ,	NA,	NG,	ΝΙ,	NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RS,	
		RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	SV,	SY,	ΤJ,	TM,	TN,	TR,	TT,	TZ,	
		UA,	UG,	US,	UZ,	VC,	VN,	ZA,	ZM,	ZW								
	RW:	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	IE,	
		IS,	ΙΤ,	LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	ВJ,	
		CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	ΝE,	SN,	TD,	ΤG,	BW,	GH,	
		GM,	KΕ,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	ΑM,	ΑZ,	BY,	
		KG,	KΖ,	MD,	RU,	ΤJ,	TM											
J	JP 2007217398				Α		2007	070830 JP 2006-213784							20060804			
PRIORITY APPLN. INFO.:							JP 2006-10089				Ž	A 20060118						
									JP 2006-213784					i	A 20060804			

AB It is intended to provide a laxative with a gentle cathartic action and reduced diarrhea episodes and a food containing the same. A laxative containing

genkwanin 5-0- β -primeveroside as an active ingredient. A laxative containing iriflophenone 2-0- α -rhamnoside as an active ingredient. A laxative containing Aquilaria agallocha leaf extract containing genkwanin 5-0- β -primeveroside as an active ingredient. A laxative containing Aquilaria agallocha leaf which is the origin of Aquilaria agallocha leaf as an active ingredient. A food containing any of the laxatives.

IT 943989-68-2P

RL: DMA (Drug mechanism of action); PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(Aquilaria agallocha leaf extract containing genkwanin 5-0- β -primeveroside and iriflophenone 2-0- α -rhamnoside as laxatives and health foods)

RN 943989-68-2 CAPLUS

CN Methanone, $[2-[(6-\text{deoxy}-\alpha-\text{L-mannopyranosyl}) \text{oxy}]-4,6-\text{dihydroxyphenyl}](4-\text{hydroxyphenyl})- (CA INDEX NAME)$

2

REFERENCE COUNT:

THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 10 OF 56 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2007:721154 CAPLUS

DOCUMENT NUMBER: 148:187087

TITLE: Chemical constituents of the leaves of Diospyros kaki

and their cytotoxic effects

AUTHOR(S): Chen, G.; Xue, J.; Xu, S.-X.; Zhang, R.-Q.

CORPORATE SOURCE: Department of Biological Science and Biotechnology, Beijing University of Chemical Technology, Beijing,

100029, Peop. Rep. China

SOURCE: Journal of Asian Natural Products Research (2007),

9(4), 347-353

CODEN: JANRFI; ISSN: 1028-6020

PUBLISHER: Taylor & Francis Ltd.

DOCUMENT TYPE: Journal LANGUAGE: English

AB Isolation and structure elucidation of two new compds., kakispyrone (1) and kakisaponin A (2), together with 11 known compds., from the leaves of Diospyros kaki L. are described. Their cytotoxic effects against several cancer cell lines (A549, HepG2 and HT29) are also reported.

IT 356055-68-0P

RL: BSU (Biological study, unclassified); NPO (Natural product occurrence); PRP (Properties); PUR (Purification or recovery); BIOL

(Biological study); OCCU (Occurrence); PREP (Preparation)

(chemical constituents of the leaves of Diospyros kaki and their cytotoxic effects)

RN 356055-68-0 CAPLUS

CN Methanone, [2-(β -D-glucopyranosyloxy)-4,6-dihydroxyphenyl]phenyl-(CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 11 OF 56 CAPLUS COPYRIGHT 2008 ACS on STN T.4 ACCESSION NUMBER: 2007:110604 CAPLUS DOCUMENT NUMBER: 146:169565 TITLE: Simultaneous determination of benzophenones and gentisein in Hypericum annulatum moris by high-performance liquid chromatography AUTHOR(S): Zheleva-Dimitrova, D.; Gevrenova, R.; Nedialkov, P.; Kitanov, G. CORPORATE SOURCE: Department of Pharmacognosy, Faculty of Pharmacy, Medical University Sofia, Sofia, 1000, Bulg. SOURCE: Phytochemical Analysis (2006), Volume Date 2007, 18(1), 1-6 CODEN: PHANEL; ISSN: 0958-0344 PUBLISHER: John Wiley & Sons Ltd. DOCUMENT TYPE: Journal English LANGUAGE: The content of the benzophenones, hypericophenonoside, neoannulatophenonoside, annulatophenonoside, annulatophenone, acetylannulatophenonoside and the xanthone derivative gentisein have been determined in aerial parts, leaves, flowers and stems of Hypericum annulatum Moris. Extraction of samples with methanol by magnetic stirring at room temperature allowed a good recovery of analytes (from 90.70% for gentisein to 103.81% for annulatophenonoside) and the precision of the entire procedure was <6.05%. The subsequent HPLC separation and quantification was achieved using a Hypersil ODS C18 column and UV detection at 290 nm. The mobile phase comprised methanol and 20 mm potassium dihydrogen phosphate (adjusted to a pH of 3.19 with o-phosphoric acid), and gradient elution mode was applied. The detection limits were 0.03, 0.02 and 0.001 $\mu g/mL$ for hypericophenonoside, acetylannulatophenonoside and gentisein, resp. The total amts. of the phenolic compds. assayed ranged from 10.92 mg/g in stems to 82.86 mg/g in leaves. Hypericophenonoside was the dominant benzophenone present in the majority of the plant samples, being present in amts. between $7.54 \pm 0.25 \, \text{mg/g}$ in stems and $64.22 \pm 2.44 \, \text{mg/g}$ in leaves. Hypericophenonoside accounted for up to 77.50% of the components found in the leaves, whereas annulatophenonoside $(6.29 \pm 0.15 \text{ mg/g})$ and acetylannulatophenonoside $(8.95 \pm 0.09 \text{ mg/g})$ were detected in much lower quantities. In contrast to leaves, flowers showed a tendency towards higher contents of gentisein $(9.35 \pm 0.07 \text{ mg/g})$ and neoannulatophenonoside $(4.72 \pm 0.04 \text{ mg/g})$ than the other parts assayed. 366493-03-0 909005-71-6 ΙT RL: ANT (Analyte); ANST (Analytical study) (determination of benzophenones and gentisein in Hypericum annulatum moris by high-performance liquid chromatog.) 366493-03-0 CAPLUS RN Methanone, $[2-(\beta-D-glucopyranosyloxy)-5-hydroxyphenyl](2,4,6-$ CN

Absolute stereochemistry. Rotation (+).

trihydroxyphenyl) - (CA INDEX NAME)

RN 909005-71-6 CAPLUS

CN Methanone, (3,5-dihydroxyphenyl)[2-(β -D-glucopyranosyloxy)-6-hydroxy-4-methoxyphenyl]- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

25

REFERENCE COUNT:

THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 12 OF 56 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2007:35418 CAPLUS

DOCUMENT NUMBER: 146:114753

TITLE: Sergliflozin, a novel selective inhibitor of

low-affinity sodium glucose cotransporter (SGLT2), validates the critical role of SGLT2 in renal glucose

reabsorption and modulates plasma glucose level

AUTHOR(S): Katsuno, Kenji; Fujimori, Yoshikazu; Takemura, Yukiko;

Hiratochi, Masahiro; Itoh, Fumiaki; Komatsu, Yoshimitsu; Fujikura, Hideki; Isaji, Masayuki Discovery Research Laboratory II. R&D. Kissei

CORPORATE SOURCE: Discovery Research Laboratory II, R&D, Kissei Pharmaceutical Co., Ltd., Azumino, Japan

SOURCE: Journal of Pharmacology and Experimental Therapeutics

(2007), 320(1), 323-330

CODEN: JPETAB; ISSN: 0022-3565

PUBLISHER: American Society for Pharmacology and Experimental

Therapeutics

DOCUMENT TYPE: Journal LANGUAGE: English

The low-affinity sodium glucose cotransporter (SGLT2), which is expressed AB specifically in the kidney, plays a major role in renal glucose resorption in the proximal tubule. We have discovered sergliflozin, a prodrug of a novel selective SGLT2 inhibitor, based on benzylphenol glucoside. In structure, it belongs to a new category of SGLT2 inhibitors and its skeleton differs from that of phlorizin, a nonselective SGLT inhibitor. We investigated its pharmacol. properties and potencies in vitro and in vivo. By examining a Chinese hamster ovary-K1 cell line stably expressing either human SGLT2 or human high-affinity sodium glucose cotransporter (SGLT1), we found sergliflozin-A (active form) to be a highly selective and potent inhibitor of human SGLT2. At pharmacol. doses, sergliflozin, sergliflozin-A, and its aglycon had no effects on facilitative glucose transporter 1 activity, which was inhibited by phloretin (the aglycon of phlorizin). The transport maximum for glucose in the kidney was reduced by sergliflozin-A in normal rats. As a result of this effect, orally administered sergliflozin increased urinary glucose excretion in mice, rats, and dogs in a dose-dependent manner. In an oral glucose tolerance test in diabetic rats, sergliflozin exhibited glucose-lowering effects independently of insulin secretion. Any glucose excretion induced by sergliflozin did not affect normoglycemia or electrolyte balance. These data indicate that selective inhibition of SGLT2 increases urinary glucose excretion by inhibiting renal glucose resorption. As a representative of a new category of antidiabetic drugs, sergliflozin may provide a new and unique approach to the treatment of diabetes mellitus.

IT 408504-26-7, Sergliflozin

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(sergliflozin, a novel selective inhibitor of low-affinity sodium glucose cotransporter (SGLT2), validates the critical role of SGLT2 in renal glucose reabsorption and modulates plasma glucose level)

RN 408504-26-7 CAPLUS

CN β -D-Glucopyranoside, 2-[(4-methoxyphenyl)methyl]phenyl, 6-(ethyl carbonate) (CA INDEX NAME)

35

REFERENCE COUNT:

THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 13 OF 56 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:672038 CAPLUS

DOCUMENT NUMBER: 145:305608

TITLE: Cytoprotective effects of 5 benzophenones and a

xanthone from Hypericum annulatum in models of epirubicin-induced cytotoxicity: SAR-analysis and

mechanistic investigations

AUTHOR(S): Momekov, Georgi; Nedialkov, Paraskev T.; Kitanov,

Gerassim M.; Zheleva-Dimitrova, Dimitrina Zh.;

Tzanova, Tzvetomira; Girreser, Ulrich; Karaivanova,

Margarita

CORPORATE SOURCE: Lab. of Molecular Pharmacology and Experimental

Chemotherapy, Department of Pharmacology and

Toxicology, Faculty of Pharmacy, Medical

University-Sofia, Bulg.

SOURCE: Medicinal Chemistry (2006), 2(4), 377-384

CODEN: MCEHAJ; ISSN: 1573-4064

PUBLISHER: Bentham Science Publishers Ltd.

DOCUMENT TYPE: Journal LANGUAGE: English

A new benzophenone O-glucoside neoannulatophenonoside (1) together with the known pinocembrin-7-0-qlucoside were isolated from the aerial parts of Hyperium annulatum Moris (Guttiferae). The former was identified as 3',5',6-trihydroxy-4-methoxybenzophenone-2-0- β -D-glucopyranoside by means of chemical and phys. evidence. The cytoprotective effects of the new compound together with the previously isolated from this species hypericophenonoside (2), annulatophenone (3), annulatophenonoside (4), acetylannulatophenonoside (5) and 1,3,7-trihydroxyxanthone (6) were evaluated in a model of epirubicin-induced cellular toxicity in K-562 cells. While the benzophenone O-glycosides 1, 2, 4 and 5 exerted substantial cytoprotective effects against the epirubicin cytotoxicity in K-562 cells the aglycons 3 and 6 lacked any significant cytoprotective activity. Biochem. investigations aimed at evaluating the free-radical scavenging activity of the tested compds. as well as their effects on the cellular glutathione stores were carried out as well, aiming at unravelling the mechanisms of cytoprotection. Finally, the ability of 1, 4 and 5 to ameliorate epirubicin-induced anticlonogenic effects on bone marrow cells colony forming units, in vitro were also evaluated. together, the exptl. data indicate that the benzophenone glycosides isolated from H. annulatum have a substantial cytoprotective potential against the toxic effects induced by epirubicin and necessitates further detailed pharmacol. evaluation of these compds. as possible chemoprotective/radioprotective agents.

IT 366493-03-0P, Hypericophenonoside 909005-71-6P

RL: PAC (Pharmacological activity); PRP (Properties); PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(cytoprotective effects of 5 benzophenones and a xanthone from Hypericum annulatum in models of epirubicin-induced cytotoxicity and SAR-anal. and mechanistic investigations)

RN 366493-03-0 CAPLUS

CN Methanone, $[2-(\beta-D-glucopyranosyloxy)-5-hydroxyphenyl](2,4,6-trihydroxyphenyl)- (CA INDEX NAME)$

Absolute stereochemistry. Rotation (+).

RN 909005-71-6 CAPLUS

CN Methanone, (3,5-dihydroxyphenyl)[2-(β -D-glucopyranosyloxy)-6-hydroxy-4-methoxyphenyl]- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

REFERENCE COUNT:

34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 14 OF 56 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:616744 CAPLUS

DOCUMENT NUMBER: 146:418308

TITLE: Chemical constituents from Mahkota dewa

AUTHOR(S): Zhang, Yan-Bing; Xu, Xiang-Jun; Liu, Hong-Min

CORPORATE SOURCE: New Drug Research and Development Centre, Zhengzhou

University, Zhengzhou, 450052, Peop. Rep. China

SOURCE: Journal of Asian Natural Products Research (2005),

Volume Date 2006, 8(1-2), 119-123 CODEN: JANRFI; ISSN: 1028-6020

PUBLISHER: Taylor & Francis Ltd.

DOCUMENT TYPE: Journal LANGUAGE: English

GΙ

AB A new phenolic glycoside (I), mahkoside A, together with six known compds. including mangiferin (2), kaempferol-3-0- β -D-glucoside (3), dodecanoic acid (4), palmitic acid (5) Et stearate (6) and sucrose (7), were isolated from the pit of Mahkota dewa (Phaleria macrocarpa). Their structures were identified on the basis of spectroscopic anal. All the compds. were isolated from the title plant for the first time.

Ι

IT 934281-45-5P, Mahkoside A

RL: NPO (Natural product occurrence); PRP (Properties); PUR (Purification or recovery); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation)

(chemical constituents from Phaleria macrocarpa)

RN 934281-45-5 CAPLUS

CN Methanone, [2-(β -D-glucopyranosyloxy)-4-hydroxy-6-methoxyphenyl](4-hydroxyphenyl)- (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 15 OF 56 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:544481 CAPLUS

DOCUMENT NUMBER: 145:45943

TITLE: Preparation of phenyl- β -D-glucopyranosides as

antidiabetic agents

INVENTOR(S): Mederski, Werner; Van Amsterdam, Christoph; Burger,

Christa; Greiner, Hartmut

PATENT ASSIGNEE(S): Merck Patent G.m.b.H., Germany

SOURCE: PCT Int. Appl., 63 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

GΙ

PA	PATENT NO.					KIND DATE			APPLICATION NO.						DATE		
WO	WO 2006058597					A1 20060608			WO 2005-EP11875						20051107		
	W:										BG,						
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KM,	KN,	KP,	KR,
		KΖ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	LY,	MA,	MD,	MG,	MK,	MN,	MW,	MX,
		MZ,	NA,	NG,	NI,	NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,
		SG,	SK,	SL,	SM,	SY,	ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,
		VN,	YU,	ZA,	ZM,	ZW											
	RW:	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,
		IS,	ΙΤ,	LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	ΒJ,
		CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	ΤG,	BW,	GH,
						•		SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	ΑM,	AΖ,	BY,
					RU,												
	1020																
	2005																
CA	. 2589	105			A1		2006	0608		CA 2	005-	2589	105		2	0051	107
EP	1817																
	R:										ES,						
			•		•						PT,						
CN	1010	6882	3		A						2005-						
JP	2008 2007	5218	42		Τ						2007-						
MX	2007	0639	7		A						2007-						
KR	2007	0855	68		A		2007	0827		KR 2	2007-	7121	9 /		2	0070	530
	2007																
	2007				А		2007	0817				_					
PRIORIT	Y APP	LN.	TNEO	.:							2004-			-			
OTHER C	OUDOD	(C)			O 7 O		TT 1.4	E . 4E4			2005-				w 2	0051	ΙΟ /
OTHER S	OURCE	CASREACT 145:45943; MARPAT 145:45943															

AΒ Title compds. I [T = heterocycle with 1-3 N or O atoms with provisos; E =(CH2)n; R, R' = OH, H, F, etc.; R'' = OH, F; R1 = H, COOA; R2, R2' = H, halo, A, etc.; A = alkyl with provisos; n = 1-2] and their pharmaceutically acceptable salts and formulations were prepared For example, hydrolysisiof tetraacetate II (X = COCH3) afforded phenylglucopyranoside II (X = H) in 72% yield. Compds. I are claimed to be useful as antidiabetic agents. ΙT 889870-13-7P 889870-14-8P 889870-16-0P 889870-18-2P 889870-19-3P 889870-20-6P 889870-23-9P 889870-25-1P 889870-26-2P 889870-27-3P 889870-28-4P 889870-31-9P 889870-33-1P RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of phenyl- β -D-glucopyranosides as antidiabetic agents) RN 889870-13-7 CAPLUS 2(1H) -Pyridinone, 4-ethyl-1-[[2-(β -D-glucopyranosyloxy)phenyl]methyl]-CN (CA INDEX NAME)

RN 889870-14-8 CAPLUS CN 2(1H)-Pyridinone, 1-[[2-(β -D-glucopyranosyloxy)phenyl]methyl]-4-methyl- (CA INDEX NAME)

Absolute stereochemistry.

RN 889870-16-0 CAPLUS CN 2,3-Pyrazinedione, 1-ethyl-4-[[2-(β -D-glucopyranosyloxy)phenyl]methyl]-1,4-dihydro- (CA INDEX NAME)

RN 889870-18-2 CAPLUS

CN 3(2H)-Pyridazinone, 2-[[2-(β -D-glucopyranosyloxy)phenyl]methyl]-6-methyl- (CA INDEX NAME)

Absolute stereochemistry.

RN 889870-19-3 CAPLUS

CN Piperazinone, $1-[[2-(\beta-D-glucopyranosyloxy)phenyl]methyl]-4-phenyl-(9CI) (CA INDEX NAME)$

Absolute stereochemistry.

RN 889870-20-6 CAPLUS

CN 1-Piperazinecarboxylic acid, $4-[[2-(\beta-D-glucopyranosyloxy)phenyl]meth$ yl]-3-oxo-, phenylmethyl ester (CA INDEX NAME)

RN 889870-23-9 CAPLUS CN 2-Piperidinone, 4-ethyl-1-[[2-(β -D-glucopyranosyloxy)phenyl]methyl]-, (4S)- (CA INDEX NAME)

Absolute stereochemistry.

RN 889870-25-1 CAPLUS

CN Acetamide, N-[1-[[2-(β -D-glucopyranosyloxy)phenyl]methyl]-1,2-dihydro-2-oxo-4-pyrimidinyl]- (CA INDEX NAME)

RN 889870-26-2 CAPLUS

CN 2(1H)-Pyridinone, 1-[[2-(β -D-glucopyranosyloxy)phenyl]methyl]-4-(phenylmethoxy)- (CA INDEX NAME)

Absolute stereochemistry.

RN 889870-27-3 CAPLUS

CN 4(1H)-Pyridinone, 1-[[2-(β -D-glucopyranosyloxy)phenyl]methyl]-2,6-dimethyl- (CA INDEX NAME)

Absolute stereochemistry.

RN 889870-28-4 CAPLUS

RN 889870-31-9 CAPLUS

CN 3-Morpholinone, 4-[[2-(β -D-glucopyranosyloxy)phenyl]methyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 889870-33-1 CAPLUS

CN 2(1H)-Pyrimidinone, 1-[[2-(β -D-glucopyranosyloxy)phenyl]methyl]-4-methyl- (CA INDEX NAME)

Absolute stereochemistry.

2

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 16 OF 56 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:404928 CAPLUS

DOCUMENT NUMBER: 145:181993

TITLE: Effect of benzophenones from Hypericum annulatum on

carbon tetrachloride-induced toxicity in freshly

isolated rat hepatocytes

AUTHOR(S): Mitcheva, Mitka; Kondeva, Magdalena; Vitcheva,

Vessela; Nedialkov, Paraskev; Kitanov, Gerassim

CORPORATE SOURCE: Departments of Pharmacology and Toxicology, Faculty of

Pharmacy, Medical University - Sofia, Sofia, Bulg.

SOURCE: Redox Report (2006), 11(1), 3-8

CODEN: RDRPE4; ISSN: 1351-0002

URL: http://www.ingentaconnect.com/content/maney/rer/2

006/00000011/00000001

PUBLISHER: Maney Publishing

DOCUMENT TYPE: Journal; (online computer file)

LANGUAGE: English

Five benzophenones and a xanthone, isolated from Hypericum annulatum Moris, were investigated for their protective effect against carbon tetrachloride toxicity in isolated rat hepatocytes. The benzophenones and the xanthone gentisein were administered alone (100 μM) and in combination with CCl4 (86 μ M). CCl4 undergoes dehalogenation in the liver endoplasmic reticulum. This process leads to trichlormethyl radical (\cdot CCl3) formation, initiation of lipid peroxidn., and measurable toxic effects on the hepatocytes. The levels of thiobarbituric acid reactive substances (TBARS) were assayed as an index of lipid peroxidn. (LPO). Lactate dehydrogenase (LDH) leakage, cell viability and reduced glutathione (GSH) depletion were used as signs of cytotoxicity. CCl4 significantly decreased hepatocyte viability, GSH level and increased TBARS level and LDH leakage as compared to the control. Our data indicate that 2,3',5',6-tetrahydroxy-4-methoxybenzophenone, $2-0-\alpha-L$ arabinofuranosyl-3',5',6-trihydroxy-4-methoxybenzophenone and $2-0-\alpha-L-3'-acetylarabinofuranosyl-3',5',6-trihydroxy-4$ methoxybenzophenone showed weaker toxic effects compared to CC14 and in combination showed statistically significant protection against the toxic agent.

IT 366493-03-0, Hypericophenonoside

RL: ADV (Adverse effect, including toxicity); BIOL (Biological study) (evaluation of protective effect of benzophenones from Hypericum annulatum on carbon tetrachloride-induced toxicity in freshly isolated rat hepatocytes)

RN 366493-03-0 CAPLUS

CN Methanone, [2-(β -D-glucopyranosyloxy)-5-hydroxyphenyl](2,4,6-trihydroxyphenyl)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

16

REFERENCE COUNT:

THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 17 OF 56 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:75261 CAPLUS

DOCUMENT NUMBER: 144:121859

TITLE: Progression inhibitor for disease attributed to

abnormal accumulation of liver fat

INVENTOR(S): Katsuno, Kenji; Fujimori, Yoshikazu; Isaji, Masayuki

PATENT ASSIGNEE(S): Kissei Pharmaceutical Co., Ltd., Japan

SOURCE: PCT Int. Appl., 20 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA'	PATENT NO.						KIND DATE				ICAT		DATE				
WO	2006009149				A1 20060126			,						2	0050	719	
	W:	ΑE,	AG,	AL,	ΑM,	AT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FΙ,	GB,	GD,
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KM,	KP,	KR,	KΖ,
		LC,	LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,
		NG,	NΙ,	NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,
		SL,	SM,	SY,	ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,
		ZA,	ZM,	ZW													
	RW:	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	IE,
		IS,	ΙΤ,	LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	ВJ,
		CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	ΤG,	BW,	GH,
		GM,	ΚE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ,	BY,
		KG,	KΖ,	MD,	RU,	ΤJ,	TM										
CA	2572	793			A1		2006	0126	1	CA 2	005-	2572	793	20050719			
EP	1782	828			A1		2007	0509		EP 2	005-	7620.	58		2	0050	719
	R:	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	IE,
		IS,	ΙΤ,	LI,	LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR	
US	2008	0045	466		A1		2008	0221		US 2	007-	5722.	51		2	0070	117
MX	2007	0081	1		А		2007	0402]	MX 2	007-	811			2	0070	119
RIORIT	Y APP	LN.	INFO	.:					1	JP 2	004-	2136	75	A 20040721			
									,	WO 2	005-	JP13:	262	Ī	W 2	0050	719

AB A pharmaceutical composition that is effective as a progression inhibitor for diseases attributed to the abnormal accumulation of liver fat. In particular, there is provided a pharmaceutical composition characterized by containing a sodium/glucose cotransporter 2 inhibitor as an active ingredient. This pharmaceutical composition because of capability of inhibiting any abnormal accumulation of fat in the liver is highly suitable for use as a progression inhibitor for not only general fatty liver but also non-alc. fatty liver (NAFL), non-alc. steatohepatitis (NASH), hyperalimentation-induced fatty liver, diabetic fatty liver, alc.-induced fatty liver or toxic fatty liver.

IT 360775-96-8

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(sodium/glucose cotransporter 2 inhibitors for disease attributed to abnormal accumulation of liver fat)

RN 360775-96-8 CAPLUS

CN β -D-Glucopyranoside, 2-[(4-methoxyphenyl)methyl]phenyl (CA INDEX NAME)

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 18 OF 56 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:1279967 CAPLUS

DOCUMENT NUMBER: 144:103963

TITLE: Xanthone O-Glycosides and Benzophenone O-Glycosides

from the Roots of Polygala tricornis Li, Jun; Jiang, Yong; Tu, Peng-Fei

CORPORATE SOURCE: Department of Natural Medicines, School of

Pharmaceutical Sciences, Peking University Health

Science Center, Beijing, 100083, Peop. Rep. China

SOURCE: Journal of Natural Products (2005), 68(12), 1802-1804

CODEN: JNPRDF; ISSN: 0163-3864

PUBLISHER: American Chemical Society-American Society of

Pharmacognosy

DOCUMENT TYPE: Journal LANGUAGE: English

GΙ

AUTHOR(S):

AB A new benzophenone O-glycoside, tricornoside A (I), and five new xanthone O-glycosides, tricornosides B-F, were isolated from the roots of Polygala tricornis together with three known glycosides. The structures of new compds. were elucidated on the basis of chemical and spectroscopic evidence.

IT 356055-68-0P, Garcimangosone D

Ι

RL: BSU (Biological study, unclassified); PUR (Purification or recovery); BIOL (Biological study); PREP (Preparation)

(xanthone and benzophenone glycosides from the roots of Polygala tricornis)

RN 356055-68-0 CAPLUS

CN Methanone, [2-(β -D-glucopyranosyloxy)-4,6-dihydroxyphenyl]phenyl-(CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

8

REFERENCE COUNT:

THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 19 OF 56 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:1106864 CAPLUS

DOCUMENT NUMBER: 143:367528

TITLE: Preparation of glucopyranoside compounds containing

phenol moiety as SGLT inhibitors

INVENTOR(S): Fujikura, Hideki; Fushimi, Nobuhiko; Isaji, Masayuki

PATENT ASSIGNEE(S): Kissei Pharmaceutical Co., Ltd., Japan

SOURCE: PCT Int. Appl., 74 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA	PATENT NO.					KIND DATE				APPLICATION NO.						DATE			
WO	WO 2005095429			A1 20051013			WO 2005-JP6702						20050330						
	W:	ΑE,	AG,	AL,	ΑM,	ΑT,	ΑU,	ΑZ,	ΒA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,		
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FΙ,	GB,	GD,		
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KΖ,	LC,		
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NΙ,		
		NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,		
		SY,	ΤJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW	
	RW:	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,		
		AZ,	BY,	KG,	KZ,	MD,	RU,	ΤJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,		
		EE,	ES,	FΙ,	FR,	GB,	GR,	HU,	ΙE,	IS,	IT,	LT,	LU,	MC,	NL,	PL,	PT,		
		RO,	SE,	SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,		
		MR,	NE,	SN,	TD,	TG													
CA	2560	005			A1		2005	1013	CA 2005-2560005					20050330					
EP	1731	524			A1		2006	1213		EP 2	005-	7289	07		2	0050	330		
	R:	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FΙ,	FR,	GB,	GR,	HU,	ΙE,		
		IS,	IT,	LI,	LT,	LU,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR				
US	2007	0185	197	•	A1		2007	0809		US 2	006-	5994	44	·	2	0060	928		
PRIORIT	Y APP	LN.	INFO	.:					1	JP 2	004-	1018	93	A 20040331					
									,	WO 2	005-	JP67	02	1	W 2	0050	330		

OTHER SOURCE(S): MARPAT 143:367528

GI

$$R^2$$
 R^3
 R^4

Ι

Title compds. I [R1, R2 = H, OH, amino, etc.; R3, R4 = H, OH, halo, etc.; ring A = aryl, heteroaryl; G = II; E1 = H, F; E2 = H, F, methyl] were prepared For example, substitution of 2-(4-methoxybenzyl)phenyl 2,3,4-tribenzoyl- β -D-glucopyranoside, e.g., prepared from 2-(4-methoxybenzyl)phenyl β -D-glucopyranoside in 2 steps, using DAST followed by debenzoylation with NaOMe afforded 2-(4-methoxybenzyl)phenyl 6-deoxy-6-fluoro- β -D-glucopyranoside (III). In SGLT2 (sodium-dependent glucose transporter 2) inhibition assays, the IC50 value of compound III was 86 nM. Compds. I are claimed useful for the treatment of diabetes, obesity, etc.

IT 866476-44-0P
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
 (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
 (Uses)

(preparation of glucopyranoside compds. containing phenol moiety as SGLT inhibitors for treatment of diabetes, obesity, etc.)

RN 866476-44-0 CAPLUS

CN β -D-Glucopyranoside, 2-[(4-methoxyphenyl)methyl]phenyl 6-deoxy-6-fluoro- (CA INDEX NAME)

IT 360775-96-8

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of glucopyranoside compds. containing phenol moiety as SGLT inhibitors for treatment of diabetes, obesity, etc.)

RN 360775-96-8 CAPLUS

CN β -D-Glucopyranoside, 2-[(4-methoxyphenyl)methyl]phenyl (CA INDEX NAME)

Absolute stereochemistry.

IT 866476-37-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of glucopyranoside compds. containing phenol moiety as SGLT inhibitors for treatment of diabetes, obesity, etc.)

RN 866476-37-1 CAPLUS

CN β -D-Glucopyranoside, 2-[(4-methoxyphenyl)methyl]phenyl

6-O-(triphenylmethyl)- (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 20 OF 56 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:612316 CAPLUS

DOCUMENT NUMBER: 143:115753

TITLE: Synthesis of glucopyranosyloxy-substituted

2-benzylphenyl derivatives and their use in treating

metabolic diseases

INVENTOR(S): Himmelsbach, Frank; Eickelmann, Peter; Barsoumian,

Edward Leon

PATENT ASSIGNEE(S): Boehringer Ingelheim International G.m.b.H., Germany;

Boehringer Ingelheim Pharma G.m.b.H. & Co. K.-G.

SOURCE: PCT Int. Appl., 55 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

GΙ

PA	PATENT NO.				KIND DATE			APPLICATION NO.						DATE				
	2005 2005							-							2	0041	216	
		CN, GE, LK, NO, TJ,	CO, GH, LR, NZ, TM,	CR, GM, LS, OM, TN,	CU, HR, LT, PG, TR,	CZ, HU, LU, PH, TT,	DE, ID, LV, PL, TZ,	AZ, DK, IL, MA, PT, UA, MZ,	DM, IN, MD, RO, UG,	DZ, IS, MG, RU, US,	EC, JP, MK, SC, UZ,	EE, KE, MN, SD, VC,	EG, KG, MW, SE, VN,	ES, KP, MX, SG, YU,	FI, KR, MZ, SK, ZA,	GB, KZ, NA, SL, ZM,	GD, LC, NI, SY, ZW,	SM
	1006	EE, RO, MR,	ES, SE, NE,	FI, SI, SN,	FR, SK, TD,	GB, TR, TG	GR, BF,	TJ, HU, BJ,	IE, CF,	IS, CG,	IT, CI,	LT, CM,	LU, GA,	MC, GN,	NL, GQ,	PL, GW,	PT, ML,	
	1036							0721										
	2548 1699														_			
EF								FR,										
	Ι	,	,	•		,		MK,		•	,	•					,	
		•	HR,	•	•	,	,	,	o - ,	,	,	,	·-,	,	,	,	,	
JP	2007						2007	0614		JP 2	006-	5460	00		2	0041	216	
US	2005	0187	168		A1		2005	0825		US 2	004-	1887	0		2	0041	221	
US	7371	732			В2		2008	0513										
PRIORIT	Y APP	LN.	INFO	.:						DE 2	003-	1036	1133		A 2	0031	222	
										US 2	004-	5385	60P		P 2	0040	123	
										WO 2	004-	EP14.	319	,	W 2	0041	216	
OTHER S	OURCE	(S):			MAR	PAT	143:	1157	53									

MeO
$$CO - O - CH_2$$
 $O - CH_2 - p - C_6H_4 - O - O$ $O - CH_2 - p - C_6H_4 - O$ $O - CH_2 - p - C_6H_4 - O$

AB The invention relates to glucopyranosyloxy-substituted aromates (e.g. (I)), their tautomers, stereoisomers, mixts. and salts, especially the physiol. compatible salts comprising inorg. or organic acids and having valuable

pharmacol. properties, especially an inhibiting effect on the sodium-dependent glucose cotransporter SGLT2, and their use in the treatment of diseases, especially metabolic diseases such as diabetes (no data). Thus, 2,3,4,6-tetra-O-acetyl- α -D-glucopyranosyl bromide was reacted with 2-[4-((R)-tetrahydrofuran-3-yloxy)benzyl]phenol (preparation given), deacetylated, and the resultant product reacted with Me chloroformate to give I. Formulations for administering the title compds. are given. 857854-98-9P 857854-99-0P 857855-00-6P ΙT 857855-01-7P 857855-02-8P 857855-03-9P 857855-04-0P 857855-05-1P RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of glucopyranosyloxy-substituted 2-benzylphenyl derivs. and their use in treating metabolic diseases) RN 857854-98-9 CAPLUS β -D-Glucopyranoside, 2-[[4-[[(3R)-tetrahydro-3furanyl]oxy]phenyl]methyl]phenyl (CA INDEX NAME)

Absolute stereochemistry.

CN

857854-99-0 CAPLUS RN β -D-Glucopyranoside, 2-[(4-ethynylphenyl)methyl]phenyl (CA INDEX CN

Absolute stereochemistry.

RN 857855-00-6 CAPLUS β -D-Glucopyranoside, 2-[[4-[[(3S)-tetrahydro-3-CN furanyl]oxy]phenyl]methyl]phenyl (CA INDEX NAME) Absolute stereochemistry.

RN 857855-01-7 CAPLUS

CN β -D-Glucopyranoside, 4-fluoro-2-[[4-[[(3R)-tetrahydro-3-furanyl]oxy]phenyl]methyl]phenyl (CA INDEX NAME)

Absolute stereochemistry.

RN 857855-02-8 CAPLUS

CN β -D-Glucopyranoside, 2-methoxy-6-[[4-[[(3R)-tetrahydro-3-furanyl]oxy]phenyl]methyl]phenyl (CA INDEX NAME)

RN 857855-03-9 CAPLUS

CN β -D-Glucopyranoside, 2-[(4-ethynylphenyl)methyl]phenyl, 6-(methyl carbonate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 857855-04-0 CAPLUS

CN β -D-Glucopyranoside, 2-[[4-[[(3R)-tetrahydro-3-furanyl]oxy]phenyl]methyl]phenyl, 6-(methyl carbonate) (9CI) (CA INDEX NAME)

RN 857855-05-1 CAPLUS

CN β -D-Glucopyranoside, 2-[[4-[[(3S)-tetrahydro-3-furanyl]oxy]phenyl]methyl]phenyl, 6-(methyl carbonate) (9CI) (CA INDEX NAME)

ANSWER 21 OF 56 CAPLUS COPYRIGHT 2008 ACS on STN T.4

2005:18973 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 143:112329

Phytochemical study of flowers and latex of TITLE:

Cryptostegia grandiflora R.Br. cultivated in Egypt AUTHOR(S): El Zalabani, S. M.; Abdel Sattar, E. A.; Fathy, F. I.;

Shehab, N. G.

Pharmacognosy Department, Faculty of Pharmacy, Cairo CORPORATE SOURCE:

University, Cairo, Egypt

SOURCE: Bulletin of the Faculty of Pharmacy (Cairo University)

(2004), 42(2), 159-169

CODEN: BFPHA8; ISSN: 1110-0931

PUBLISHER: Cairo University, Faculty of Pharmacy

DOCUMENT TYPE: Journal LANGUAGE: English

From the flowers of Cryptostegia grandiflora R.Br. two cardenolides AR oleandrigenin (1) and gitoxigenin (2), as well as, two flavonoid glycosides hyperoside (5) and astragalin (6), and their aglycons quercetin (4) and kaempferol (3) were isolated. While, β -amyrin (7), lupeol (8), α -amyrin (9), β -sitosterol (10) and β -sitosterol-3-0- β -D-glucoside (11), in addition to a phenolic glucoside 2,4,6-trihydroxy benzophenone-2-O- β -D-glucopyranoside (12) were isolated from the latex of fresh unripe fruits. Characterization of the isolated compds.

was achieved through phys., chemical, chromatog. and spectral analyses, as well as, by comparison with available authentic samples. All the aforementioned compds. except 1, 2 and 12 were, for the first time, isolated from the titled plant. The total flavonoid content of the

flowers was colorimetrically determined and amounted to 3.25 %. In addition,

the

lipoidal composition of the flowers and latex was qual. and quant. investigated using different chromatog. techniques (TLC and GLC).

356055-68-0P ΙT

> RL: BSU (Biological study, unclassified); PUR (Purification or recovery); BIOL (Biological study); PREP (Preparation)

(phytochem. study of flowers and latex of Cryptostegia grandiflora)

RN 356055-68-0 CAPLUS

Methanone, $[2-(\beta-D-glucopyranosyloxy)-4,6-dihydroxyphenyl]$ phenyl-CN (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

REFERENCE COUNT: 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT L4 ANSWER 22 OF 56 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:996496 CAPLUS

DOCUMENT NUMBER: 143:97543

TITLE: Synthesis and biological evaluation of the

N-acyl-N'-solanesylpiperazine derivatives AUTHOR(S): Wang, Chao-Jie; Song, Jin-Yong; Zhao, Jin

CORPORATE SOURCE: College of Chemistry and Chemical Engineering, Henan

University, Kaifeng, 475001, Peop. Rep. China

SOURCE: You ji Huaxue (2004), 24(11), 1444-1447

CODEN: YCHHDX; ISSN: 0253-2786

PUBLISHER: Kexue Chubanshe

DOCUMENT TYPE: Journal LANGUAGE: Chinese

OTHER SOURCE(S): CASREACT 143:97543

AB Using solanesol as the starting material and N-solanesylpiperazine as the key intermediate, several N-acyl-N'-solanesylpiperazine derivs. and two similar compds. containing glucosyl fragments were synthesized.

N-(2-acetylglucosylbenzoyl)-N'-solanesylpiperazine and

N-(2-glucosylbenzyl)-N'-solanesylpiperazine were designed and synthesized to evaluate their biol. activity. The structures of these compds. were confirmed by IR, 1H NMR, MS spectra and elemental anal. The products were tested in vitro for their anti-tumor activity on KB, Bel-7402 and HCt-8 cells. The preliminary biol. studies showed that N-(2-glucosylbenzyl)-N'-solanesylpiperazine had better inhibition effect than the rest of products on the three cell lines.

IT 856661-17-1P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(synthesis and biol. activity of solanesylpiperazine derivs.)

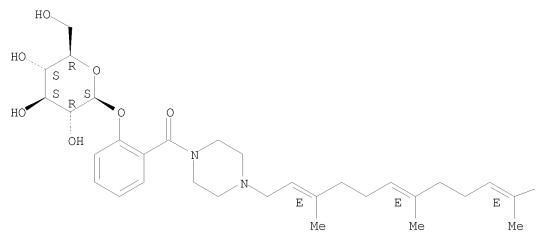
RN 856661-17-1 CAPLUS

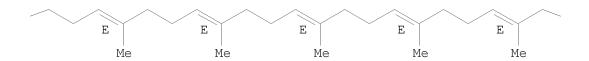
CN Piperazine, $1-[2-(\beta-D-glucopyranosyloxy)benzoyl]-4-$

[(2E,6E,10E,14E,18E,22E,26E,30E)-3,7,11,15,19,23,27,31,35-nonamethyl-2,6,10,14,18,22,26,30,34-hexatriacontanonaenyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

PAGE 1-A





PAGE 1-C



L4 ANSWER 23 OF 56 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:788803 CAPLUS

DOCUMENT NUMBER: 142:3470

TITLE: Sulfonated xanthones from Hypericum sampsonii
AUTHOR(S): Hong, Di; Yin, Feng; Hu, Li-Hong; Lu, Ping
CORPORATE SOURCE: Department of Chemistry, Zhejiang University,

Hangzhou, 310027, Peop. Rep. China

SOURCE: Phytochemistry (Elsevier) (2004), 65(18), 2595-2598

CODEN: PYTCAS; ISSN: 0031-9422

PUBLISHER: Elsevier B.V.

DOCUMENT TYPE: Journal LANGUAGE: English

GΙ

AB Xanthones, 1,3-dihydroxy-5-methoxyxanthone-4-sulfonate(I) and 1,3-dihydroxy-5-O- β -D-glycopyranosylxanthone-4-sulfonate (II), together with nine known compds. were obtained from H. sampsonii. This is the first report of sulfonated xanthonoids. Furthermore, compds. 1 and 2 exhibited significant cytotoxicity against the P388 cancer cell line.

IT 356055-68-0P

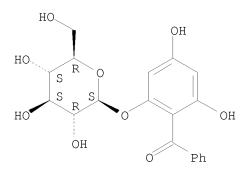
RL: BSU (Biological study, unclassified); PUR (Purification or recovery); BIOL (Biological study); PREP (Preparation)

(sulfonated xanthones from Hypericum sampsonii)

RN 356055-68-0 CAPLUS

CN Methanone, [2-(β -D-glucopyranosyloxy)-4,6-dihydroxyphenyl]phenyl-(CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



REFERENCE COUNT: 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 24 OF 56 CAPLUS COPYRIGHT 2008 ACS on STN T.4

2004:568609 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 141:117169

Human SGLT1 inhibitors containing benzylphenyl TITLE:

glucopyranoside or galactopyranoside derivatives

INVENTOR(S): Yonekubo, Shigeru; Shimizu, Kazuo; Shibazaki,

Toshihide; Tomae, Masaki; Isaji, Masayuki Kissei Pharmaceutical Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 90 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT ASSIGNEE(S):

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
				-	
JP 2004196788	A	20040715	JP 2003-404247		20031203
PRIORITY APPLN. INFO.:			JP 2002-352251	Α	20021204
OTHER SOURCE(S):	MARPAT	141:117169			

GΙ

AΒ The invention provides human glucose-sodium cotransporter (SGLT1) inhibitors containing benzylphenol derivative represented by the following general

formula I [R1 = OH, C1-6 alkyl, C1-6 alkoxy, C1-6 alkylthio, hydroxy(C1-6 alkyl), etc.; R2 = H, C1-6 alkyl, C1-6 alkoxy, phenoxy, phenylthio, phenylamino, halogen; R3, R4, R5 = H, C1-6 alkyl, C1-6 alkoxy, halogen; R6 = H, C1-6 alkyl; R7 = H, OH, amino, mono/di(C1-6 alkyl)amino, C1-6 alkyl, C1-6 alkoxy, hydroxy(C1-6 alkyl), carbamoyl(C1-6 alkyl); G = β -D-glucopyranosyl, β -D-galactopyranosyl] and pharmacol. acceptable salts or prodrugs thereof. A compound 5-hydroxy-3-methyl-2-[4-[(E)-2-[2-(sulfamoylamino)ethylcarbamoyl]vinyl]benzyl]phenyl β -D-glucopyranoside was prepared, and tested for its effect on human SGLT1 activity in vitro, and on blood glucose level in rats.

721969-15-9P 721969-16-0P 721969-17-1P ΙT

721969-18-2P 721969-19-3P 721969-20-6P

721969-21-7P 721969-22-8P 721969-24-0P

721969-25-1P 721969-26-2P 721969-27-3P

721969-28-4P 721969-33-1P 721969-34-2P

721969-35-3P 721969-36-4P 721969-37-5P

721969-38-6P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(human SGLT1 inhibitors containing benzylphenyl glucopyranoside or galactopyranoside derivs.)

RN 721969-15-9 CAPLUS

Urea, N- $[4-[[2-(\beta-D-glucopyranosyloxy)-4-hydroxy-6-$ CNmethylphenyl]methyl]phenyl]-N'-(3-pyridinylmethyl)- (9CI) (CA INDEX NAME) Absolute stereochemistry.

RN 721969-16-0 CAPLUS CN Urea, [4-[[2-(β -D-glucopyranosyloxy)-4-hydroxy-6-methylphenyl]methyl]phenyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 721969-17-1 CAPLUS CN Urea, N-[4-[[2-(β -D-glucopyranosyloxy)-4-hydroxy-6-methylphenyl]methyl]-N'-(2-pyridinylmethyl)- (9CI) (CA INDEX NAME)

RN 721969-18-2 CAPLUS

CN Urea, N-[4-[[2-(β -D-glucopyranosyloxy)-4-hydroxy-6-methylphenyl]methyl]phenyl]-N'-[(4-hydroxy-3-methoxyphenyl)methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 721969-19-3 CAPLUS

CN Benzenepropanamide, α -[4-[[2-(β -D-glucopyranosyloxy)-4-hydroxy-6-methylphenyl]methyl]phenyl]-4-hydroxy-, (α S)- (CA INDEX NAME)

RN 721969-20-6 CAPLUS

CN 2-Propenamide, $3-[4-[[2-(\beta-D-glucopyranosyloxy)-4-hydroxy-6-methylphenyl]methyl]-N-(2-pyridinylmethyl)-, (2E)- (CA INDEX NAME)$

Absolute stereochemistry. Double bond geometry as shown.

RN 721969-21-7 CAPLUS

CN 2-Propenamide, $3-[4-[[2-(\beta-D-glucopyranosyloxy)-4-hydroxy-6-methylphenyl]methyl]phenyl]-N-[3-(4-morpholinyl)propyl]-, (2E)- (CA INDEX NAME)$

Absolute stereochemistry.
Double bond geometry as shown.

HO S R O OH HO Me E H N (CH2)
$$\frac{1}{3}$$
 N O

RN 721969-22-8 CAPLUS

CN 2-Propenamide, N-[2-[(aminosulfonyl)amino]ethyl]-3-[4-[[2-(β-D-glucopyranosyloxy)-4-hydroxy-6-methylphenyl]methyl]phenyl]-, (2E)- (CAINDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

RN 721969-24-0 CAPLUS

CN Guanidine, N-cyano-N'-[3-[4-[[2-(β -D-glucopyranosyloxy)-4-hydroxy-6-methylphenyl]methyl]phenoxy]propyl]-N''-(2-hydroxyethyl)- (9CI) (CA INDEX NAME)

HO NH NH (CH₂)
$$_3$$
 OH OH OH OH

RN 721969-25-1 CAPLUS

CN β -D-Galactopyranoside, 2-[(4-ethylphenyl)methyl]-5-hydroxy-3-methylphenyl (CA INDEX NAME)

Absolute stereochemistry.

RN 721969-26-2 CAPLUS

CN Propanamide, $3-[[3-[4-[[2-(\beta-D-glucopyranosyloxy)-4-hydroxy-6-methylphenyl]methyl]-3-phenoxyphenoxy]propyl]amino]- (CA INDEX NAME)$

RN 721969-27-3 CAPLUS

CN Propanamide, $2-[[3-[4-[[2-(\beta-D-glucopyranosyloxy)-4-hydroxy-6-methylphenyl]methyl]-3-phenoxyphenoxy]propyl]amino]-2-methyl- (CA INDEX NAME)$

Absolute stereochemistry.

RN 721969-28-4 CAPLUS

CN Butanediamide, $2-[[3-[4-[[2-(\beta-D-glucopyranosyloxy)-4-hydroxy-6-methylphenyl]methyl]-3-phenoxyphenoxy]propyl]amino]-N4-(2-hydroxyethyl)-, (2S)- (CA INDEX NAME)$

RN 721969-33-1 CAPLUS

CN Benzenebutanamide, $4-[[2-(\beta-D-glucopyranosyloxy)-4-hydroxy-6-methylphenyl]methyl]-N-[2-[4-(2-hydroxyethyl)-1-piperazinyl]-1,1-dimethyl-2-oxoethyl]-3-phenoxy- (CA INDEX NAME)$

Absolute stereochemistry.

PAGE 1-A

PAGE 1-B

RN 721969-34-2 CAPLUS

CN Benzenebutanamide, $4-[[2-(\beta-D-glucopyranosyloxy)-4-hydroxy-6-methylphenyl]methyl]-N-[2-[4-(2-hydroxyethyl)-1-piperazinyl]-1,1-dimethyl-2-oxoethyl]-3-methyl- (CA INDEX NAME)$

Absolute stereochemistry.

PAGE 1-A

PAGE 1-B

OH

RN 721969-35-3 CAPLUS

CN Benzenebutanamide, $4-[[2-(\beta-D-glucopyranosyloxy)-4-hydroxyphenyl]methyl]-N-[2-[4-(2-hydroxyethyl)-1-piperazinyl]-1,1-dimethyl-2-oxoethyl]-3-methyl- (CA INDEX NAME)$

PAGE 1-B

RN 721969-36-4 CAPLUS

CN Benzenebutanamide, N-[1,1-dimethyl-2-oxo-2-(1-piperazinyl)ethyl]-4-[[2-(β -D-glucopyranosyloxy)-4-hydroxy-6-methylphenyl]methyl]-3-phenoxy-(CA INDEX NAME)

RN 721969-37-5 CAPLUS

CN Benzenebutanamide, N-[1,1-dimethyl-2-oxo-2-(1-piperazinyl)ethyl]-4-[[2-(β -D-glucopyranosyloxy)-4-hydroxy-6-methylphenyl]methyl]-3-methyl-(CA INDEX NAME)

Absolute stereochemistry.

RN 721969-38-6 CAPLUS

CN Benzenebutanamide, N-[1,1-dimethyl-2-oxo-2-(1-piperazinyl)ethyl]-4-[[2-(β -D-glucopyranosyloxy)-4-hydroxyphenyl]methyl]-3-methyl- (CA INDEX NAME)

Absolute stereochemistry.

IT 721969-55-7P 721969-60-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

 $\hbox{ (preparation of human SGLT1 inhibitors containing benzylphenyl glucopyranoside}$

or galactopyranoside derivs.)

RN 721969-55-7 CAPLUS

CN β -D-Glucopyranoside, 2-[[4-(3-azidopropoxy)phenyl]methyl]-3-methyl-5-(phenylmethoxy)phenyl (CA INDEX NAME)

$$(CH_2)_3$$
 OH OH OH OH OH

RN 721969-60-4 CAPLUS CN β -D-Galactopyranoside, 2-[(4-ethylphenyl)methyl]-3-methyl-5-(phenylmethoxy)phenyl (CA INDEX NAME)

L4 ANSWER 25 OF 56 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:110638 CAPLUS

DOCUMENT NUMBER: 140:395620

TITLE: Quantitative analysis of homeopathic mother tincture

of Boerhaavia diffusa Linn. by HPTLC employing the

therapeutically active marker "punarnavoside"

AUTHOR(S): Lalla, Jogender; Hamrapurkar, Purnima; Kulkarni,

Dhanashri; Mamania, Hemant

CORPORATE SOURCE: Mumbai, 400101, India

SOURCE: Journal of Planar Chromatography--Modern TLC (2003),

16(6), 465-468

CODEN: JPCTE5; ISSN: 0933-4173

PUBLISHER: Research Institute for Medicinal Plants

DOCUMENT TYPE: Journal LANGUAGE: English

AB Isolated punarnavoside was used as an active marker in a simple validated high-performance thin layer chromatog. (HPTLC) method for quant. estimation of the homeopathic mother tincture of Boerhaavia diffusa Linn. This HPTLC method for standardization of mother tincture of B. diffusa Linn. is a simple, rapid, cost-effective, and specific. Its sensitivity, as given by the limit of quantitation and linearity, was between 250 and 3000 mg, compared with $10\text{--}100~\mu\text{g}$ for a reported TLC-UV spectrophotometric method. The measurement of the concentration of punarnavoside, as a therapeutically active marker compound, can be used for quant. evaluation of the homeopathic content between 0.03 and 0.04%.

IT 106009-02-3, Punarnavoside

RL: BSU (Biological study, unclassified); BIOL (Biological study) (HPTLC for quant. anal. of punarnavoside in tincture of Boerhaavia diffusa)

RN 106009-02-3 CAPLUS

CN β -D-Glucopyranoside, 5-hydroxy-4-[3-(4-hydroxyphenyl)-1-oxopropoxy]-2-(phenylmethyl)phenyl (9CI) (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 26 OF 56 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2003:777816 CAPLUS

DOCUMENT NUMBER: 139:277114

TITLE: Crystals of glucopyranosyloxybenzyl benzene derivative

INVENTOR(S): Iyobe, Akira; Teranishi, Hirotaka; Tatani, Kazuya;

Yonekubo, Shigeru; Isaji, Masayuki

PATENT ASSIGNEE(S): Kissei Pharmaceutical Co., Ltd., Japan

SOURCE: PCT Int. Appl., 23 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PAT	KINI	O	DATE	TE 2			LIC	ATIO		DATE									
WO	TO 2003080635					A1 20031002				WO	200	 3-JP:	20030304						
	W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	ΑZ,	ΒA,	BB	B, B	3, B	R, B	Y,	BΖ,	CA,	CH,	CN,	
		CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC	, E	Ξ, Ε	5, F	Ι,	GB,	GD,	GE,	GH,	
		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE	, K	3, KI	R, K	Ζ,	LC,	LK,	LR,	LS,	
		LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW	7, M	K, M:	Z, NO	Ο,	NZ,	OM,	PH,	PL,	
		PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL	, T	J, TI	1, TI	Ν,	TR,	TT,	TZ,	UA,	
			•		,	,	YU,	,											
	RW:						${ m MZ}$,												
			•				TM,				•	•	•	•				,	
		,	,	- ,	- ,		IE,	•			•	•	,	,	- ,	- ,	- ,	,	
							CM,												
	A 2476800													20030304					
	2003211543													20030304 20030304					
EP	1489																		
	R:	•	,	•			ES,	•			•	•	,	•			•	PT,	
	0000	•	•	,				•		•	EE, HU, SK								
	2003										20030304								
	1642 5352	965 20			A								20030304						
					A 20061027 A 20070302				NZ 2003-535230										
					A A1		2007		IN 2004-DN2694 US 2004-507611										
					B2		2003								20040914				
MX 2004PA09229					2004			MY	200.	1_PA	1229			2	<u> </u>	922			
NO 2004PA09229						2004			MX 2004-PA9229 NO 2004-4426										
HK 1077830							2007			HK 2005-109901							0051		
							_00,					-			A 20020322				
ORITY APPLN. INFO.:															Ī		0030		

- AB It is intended to provide crystals of 2-(4-methoxybenzyl)phenyl 6-O-ethoxycarbonyl- β -D-glucopyranoside, which exhibits an excellent SGLT2 inhibitory effect and is useful as a preventive or a remedy for diseases caused by hyperglycemia, medicinal compns. containing the same and use thereof. Thus, 2-(4-methoxybenzyl)phenyl 6-O-ethoxycarbonyl- β -D-glucopyranoside α -type crystal prepared by the reaction of 2-(4-methoxybenzyl)phenyl β -D-glucopyranoside and Et chloroformate followed by recrystn. in 2,6-lutidine, isopropanol and Me Et ketone gave shelf stability at 60° for 2 mo and showed inhibitive property for human SGL T2.
- IT 360775-96-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(in preparation of crystals of glucopyranosyloxybenzyl benzene derivative as inhibitor for human SGL T2) $\,$

RN 360775-96-8 CAPLUS

CN β -D-Glucopyranoside, 2-[(4-methoxyphenyl)methyl]phenyl (CA INDEX NAME)

Absolute stereochemistry.

IT 408504-26-7P

RL: PAC (Pharmacological activity); PEP (Physical, engineering or chemical process); PYP (Physical process); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process)

(preparation of crystals of glucopyranosyloxybenzyl benzene derivative as inhibitor for human SGL T2) $\,$

RN 408504-26-7 CAPLUS

CN β -D-Glucopyranoside, 2-[(4-methoxyphenyl)methyl]phenyl, 6-(ethyl carbonate) (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT:

11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 27 OF 56 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2003:701292 CAPLUS

DOCUMENT NUMBER: 140:213940

TITLE: Phenolic and aliphatic glucosides from Cryptostegia

grandiflora and cardiotonic activity of cryptostigmin

ΙI

AUTHOR(S): Assaf, M. H.; Kamel, M. S.; Bishay, D. W.

CORPORATE SOURCE: Department of Pharmacognosy, Faculty of Pharmacy,

Assiut University, Assiut, 71526, Egypt

SOURCE: Bulletin of Pharmaceutical Sciences, Assiut University

(2003), 26(1), 41-48

CODEN: BPAUEC; ISSN: 1110-0052

PUBLISHER: Assiut University Press

DOCUMENT TYPE: Journal LANGUAGE: English

AB From the leaves of Cryptostegia grandiflora, 2 phenolic glucosides 2,4,6-trihydroxybenzophenone 2-0- β -glucopyranoside and Acanthoside B together with a megastigmane (Icariside B1) and (Z)-3-hexenyl β -D glucopyranoside were isolated. Moreover the cardiotonic activities of Cryptostegia extract and Cryptostigmin II, the major cardenolide previously isolated from the same plant leaves were also investigated. The latter showed similar effects to those of Digoxin.

IT 356055-68-0

RL: BSU (Biological study, unclassified); BIOL (Biological study) (phenolic and aliphatic glucosides from Cryptostegia grandiflora and cardiotonic activity of cryptostigmin II)

RN 356055-68-0 CAPLUS

CN Methanone, [2-(β -D-glucopyranosyloxy)-4,6-dihydroxyphenyl]phenyl-(CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 28 OF 56 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2003:188879 CAPLUS

DOCUMENT NUMBER: 139:66045

TITLE: Chemical constituents of Thai medicinal plant,

Polyalthia cerasoides

AUTHOR(S): Kanchanapoom, Tripetch; Sommit, Jarunee; Kasai, Ryoji;

Otsuka, Hideaki; Yamasaki, Kazuo

CORPORATE SOURCE: Department of Pharmaceutical Botany and Pharmacognosy,

Faculty of Pharmaceutical Sciences, Khon Kaen

University, Khon Kaen, 40002, Thailand

SOURCE: Natural Medicines (Tokyo, Japan) (2002), 56(6),

268-271

CODEN: NMEDEO; ISSN: 1340-3443
Japanese Society of Pharmacognosy

DOCUMENT TYPE: Journal LANGUAGE: English

PUBLISHER:

AB From the leaves and branches of Polyalthia cerasoides, two benzophenone glucosides (iriflophenone 2-0- β -glucoside, iriflophenone 3-C- β -glucoside), a xanthone C-glucoside (mangiferin), and two flavonoid C- β -glucosides (vitexin and isovitexin) were isolated. The structural elucidation were based on the analyses of spectroscopic methods. The 13C NMR spectral data of iriflophenone 2-0- β -glucoside were corrected

IT 245447-83-0P, Iriflophenone 2-O-β-glucoside
RL: BSU (Biological study, unclassified); NPO (Natural product occurrence); PRP (Properties); PUR (Purification or recovery); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation)

(chemical constituents of Thai medicinal plant, Polyalthia cerasoides)

RN 245447-83-0 CAPLUS

CN Methanone, $[2-(\beta-D-glucopyranosyloxy)-4,6-dihydroxyphenyl](4-hydroxyphenyl)- (CA INDEX NAME)$

Absolute stereochemistry. Rotation (-).

REFERENCE COUNT: 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 29 OF 56 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2003:117840 CAPLUS

DOCUMENT NUMBER: 138:153771

TITLE: Preparation of glucopyranosyloxybenzylbenzene

derivatives as inhibitors of human SGLT2

(sodium-dependent glucose-transporter 2), medicinal composition containing the same, medicinal use

thereof, and intermediate for production thereof Fushimi, Nobuhiko; Ito, Fumiaki; Isaji, Masayuki

PATENT ASSIGNEE(S): Kissei Pharmaceutical Co., Ltd., Japan

SOURCE: PCT Int. Appl., 78 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

INVENTOR(S):

	PATENT NO.						D	DATE		-	APPL	ICAT	DATE					
	WO	O 2003011880			A1 200			20030213			002-	JP75.		2	20020725			
		W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,
			CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FΙ,	GB,	GD,	GE,	GH,
			GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KΕ,	KG,	KR,	KΖ,	LC,	LK,	LR,	LS,
			LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	OM,	PH,	PL,
			PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ΤJ,	TM,	TN,	TR,	TT,	TZ,	UA,
			UG,	US,	UΖ,	VN,	YU,	ZA,	ZM,	ZW								
		RW:	GH,	GM,	ΚE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	ΑT,	BE,	BG,
			CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FΙ,	FR,	GB,	GR,	ΙE,	ΙΤ,	LU,	MC,	NL,
			PT,	SE,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,
			ΝE,	SN,	TD,	TG												
	AU 2002323942							2003	0217		AU 2	002-	3239	42		2	0020	725
PRIO	PRIORITY APPLN. INFO.:										JP 2	001-	2318	0.4		A 2	0010	731
										•	WO 2	002-	JP75.	36	1	W 2	0020	725
						1 (T T)		400	4 - 0 -									

OTHER SOURCE(S): MARPAT 138:153771

GΙ

$$R^{1}$$
 R^{2}
 R^{3}
 R^{3}
 R^{3}
 R^{4}
 R^{4}
 R^{4}
 R^{4}
 R^{4}
 R^{4}

2-Benzylphenyl β -D-glucopyranoside derivs. represented by the general formula (I) [wherein R1 = H, HO, NH2, mono- or di(lower alkyl)amino, cyano, carbamoyl, lower alkyl, lower alkoxy, hydroxy-lower alkyl, hydroxy-lower alkoxy, lower alkoxy-lower alkyl, lower alkoxy-lower alkoxy, carbamyl-lower alkyl, lower alkoxycarbonyl-lower alkyl, lower alkoxycarbonyl-lower alkoxy, (un)substituted 5- or 6-membered alicyclic amino optionally containing one heteroatom selected from O, S, and N atoms in the ring besides the N atom attached to the bonding position, (un)substituted 5-membered aromatic cyclic

Ι

amino; R2 = H, lower alkyl; R3 = (un)substituted aryl or 3- to 7-membered cycloalkyl, (un)substituted 5- to 6-membered aliphatic heterocyclyl optionally containing 1 or 2 same or different heteroatoms selected from O, S, and N atoms in the ring, (un)substituted 5- or 6-membered aromatic heterocyclyl optionally containing 1-4 of same or different heteroatoms selected from O, S, and N atoms in the ring], pharmacol. acceptable salts of the derivs., or prodrugs thereof are prepared These compds. have excellent human SGLT2 inhibitory activity and are useful as a preventive or remedy for diseases attributable to hyperglycemia, such as diabetes, complications of diabetes, obesity, hyperinsulinemia, glucose metabolism disorder, hyperlipidemia, hypercholesteremia, hypertriglycemia, lipid metabolism disorder, atherosclerosis, hypertension, ischemic heart failure, edema, hyperuricemia, and gout. Thus, a mixture of 2-(4-pyrazol-1ylbenzyl)phenol 0.10, 2,3,4,6-tetra-O-acetyl- α -D-glucopyranosyl bromide 0.16, benzyltributylammonium chloride 0.12 g, 5 mL CH2Cl2, and $0.32~\mathrm{mL}$ 5 N aqueous NaOH solution was stirred at room temperature for 3 h to

give, after silica gel chromatog., 0.044 g 2-(4-pyrazol-1-ylbenzyl)phenyl

2,3,4,6-tetra-O-acetyl- β -D-glucopyranoside which (0.044 g) was stirred with NaOMe in MeOH at room temperature for 1 h to give, after silica qel

chromatog., 0.020 g 2-(4-pyrazol-1-ylbenzyl)phenyl β -Dglucopyranoside (II). II in vitro showed IC50 of 0.1 nM for inhibiting the uptake of [14C]methyl α -D-glucopyranoside in CHO-K1 cells transfected with human SGLT2 expression vector.

363164-72-1P 496863-16-2P 496863-19-5P ΤТ 496863-22-0P

> RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of glucopyranosyloxybenzylbenzene derivs. as inhibitors of human human SGLT2 for prevention and treatment of diseases attributable to hyperglycemia)

RN 363164-72-1 CAPLUS

 β -D-Glucopyranoside, 2-([1,1'-biphenyl]-4-ylmethyl)phenyl (CA INDEX CN NAME)

Absolute stereochemistry.

496863-16-2 CAPLUS RN

CN β -D-Glucopyranoside, 2-[[4-(1H-pyrazol-1-yl)phenyl]methyl]phenyl (CA INDEX NAME)

RN 496863-19-5 CAPLUS CN β -D-Glucopyranoside, 2-[[4-(4-hydroxy-1-piperidinyl)phenyl]methyl]phenyl (CA INDEX NAME)

Absolute stereochemistry.

RN 496863-22-0 CAPLUS CN β -D-Glucopyranoside, 2-[[4-(2-methyl-2H-tetrazol-5-yl)phenyl]methyl]phenyl (CA INDEX NAME)

REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 30 OF 56 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2002:637688 CAPLUS

DOCUMENT NUMBER: 137:185757

TITLE: Preparation of glucopyranosyloxybenzylbenzene

derivatives as inhibitors of human SGLT2

(sodium-dependent glucose-transporter 2) activity and

medicinal use thereof

INVENTOR(S): Fushimi, Nobuhiko; Tatani, Kazuya; Fujikura, Hideki;

Nishimura, Toshihiro; Fujioka, Minoru; Nakabayashi,

Takeshi; Isaji, Masayuki

PATENT ASSIGNEE(S): Kissei Pharmaceutical Co., Ltd., Japan

SOURCE: PCT Int. Appl., 145 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

GΙ

PA'	TENT	NO.			KIND DATE						ICAT						
WO	2002	A1 20020822															
	W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	AZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,
		CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FΙ,	GB,	GD,	GE,	GH,
		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KR,	KΖ,	LC,	LK,	LR,	LS,
		LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	OM,	PH,	PL,
		PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,
		UG,	US,	UΖ,	VN,	YU,	ZA,	ZM,	ZW								
	RW:	GH,	GM,	ΚE,	LS,	MW,	${ m MZ}$,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	ΑT,	BE,	CH,
		CY,	DE,	DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	ΙΤ,	LU,	MC,	NL,	PT,	SE,	TR,
		BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG
TW	TW 255817				В		2006	0601		TW 2	2002-						
CA	2437	240			A1		2002	0822		CA 2	2002-		2	0020	213		
AU	2002	2348	71		A1	2002	0828		AU 2	2002-		20020213					
	1367									EP 2	2002-		20020213				
EP	1367	060			В1	2005	1228										
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	ΙΤ,	LI,	LU,	NL,	SE,	MC,	PT,
		ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	ΑL,	TR						
ES	2255	603			Т3		2006	0701		ES 2	2002-	7015	40		2	0020	213
US	US 20040138148					A1 20040715				US 2004-467823					2	0040	113
PRIORIT	IORITY APPLN. INFO.:									JP 2	2001-	3772	9		A 2	0010	214
										WO 2	2002-	JP11	78	1	W 2	0020	213
OTHER S	HER SOURCE(S):						MARPAT 137:185757										

AB 2-Benzylphenyl β -D-glucopyranoside derivs. represented by the following general formula (I) and pharmacol. acceptable salts thereof [wherein P = H, a group constituting a prodrug; R1 = H, NH2, mono- or

Ι

di(lower alkyl)amino, carbamoyl, lower alkyl, lower alkoxy, lower alkoxy-lower alkyl, lower alkoxy-lower alkoxy, carbamoyl-lower alkyl, carboxy-lower alkoxy, P1-O-A1- (wherein P1 = H, a group constituting a prodrug; A1 = a single bond, lower alkylene or alkyleneoxy); R2 = H, lower alkyl; R3 = lower alkyl, lower alkoxy, lower alkylthio, lower alkenyloxy, aralkyloxy, lower alkoxy-lower alkoxy, lower alkoxy-lower alkoxy, lower alkoxy-lower alkylthio, CO2H, lower alkoxycarbonyl, cyano, aralkyloxy-lower alkyl, cyano-lower alkyl, CONH2, carbamoyl-lower alkyl, NH2, mono- or di(lower alkyl)amino, lower alkoxycarbonyl-lower alkyl, carboxy-lower alkoxy, P2-O-A2- (wherein P2 = H, a group constituting a prodrug; A2 - lower alkylene, lower alkyleneoxy, lower alkylenethio, lower alkenylene); some provisos are given] are prepared These compds. are useful as preventives or remedies for diseases caused by hyperglycemia such as diabetes, diabetes complications, obesity, hyperinsulinism, glucose metabolism, hyperlipidemia, hypercholesteremia, hypertriglycemia, abnormal lipid metabolism, atherosclerosis, hypertension, ischemic heart failure, edema, hyperuricemia, and gout because of having an improved oral absorbability and exerting an excellent human SGLT2 activity inhibitory effect (in vivo). Thus, 0.037 mL Et chloroformate was added to a solution of 0.075 g 2-(4-ethylbenzyl)-5-hydroxymethylphenyl β -D-glucopyranoside in 2 mL 2,4,6-trimethylpyridine and stirred at room temperature for 17 h to

give

0.020 g 2-(4-ethylbenzyl)-5-hydroxymethylphenyl 6-0-ethoxycarbonyl- β -D-glucopyranoside (II). Oral bioavailability (serum concentration) of II was

43%

CN

RN

of that of i.v. administration in SD rats. II increased the excretion of glucose in urine from 7.0~mg/24~h/200~g body weight at 1~mg/kg body weight to 195~mg/24~h/200~g body weight at 10~mg/kg body weight when fed p.o. to SD rats.

IT 360776-02-9P 360776-03-0P 360776-05-2P

360776-06-3P 433331-02-3P 433331-12-5P

433331-13-6P 433331-14-7P 433331-20-5P

449146-45-6P 449146-75-2P 449146-76-3P

449146-77-4P 449146-78-5P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(preparation of glucopyranosyloxybenzylbenzene derivs. as inhibitors of human SGLT2 activity for prevention or treatment of diseases caused by hyperglycemia)

RN 360776-02-9 CAPLUS

 β -D-Glucopyranoside, 5-(hydroxymethyl)-2-[(4-propoxyphenyl)methyl]phenyl (CA INDEX NAME)

CN β -D-Glucopyranoside, 2-[(4-ethylphenyl)methyl]-5- (hydroxymethyl)phenyl (CA INDEX NAME)

Absolute stereochemistry.

RN 360776-05-2 CAPLUS

CN β -D-Glucopyranoside, 2-[[4-(2-hydroxyethyl)phenyl]methyl]phenyl (CA INDEX NAME)

Absolute stereochemistry.

RN 360776-06-3 CAPLUS

CN β -D-Glucopyranoside, 2-[[4-(3-hydroxypropyl)phenyl]methyl]phenyl (CA INDEX NAME)

RN 433331-02-3 CAPLUS CN β -D-Glucopyranoside, 2-[[4-[(1E)-3-hydroxy-1-propen-1-y1]phenyl]methyl]phenyl (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

RN 433331-12-5 CAPLUS
CN β -D-Glucopyranoside, 5-amino-2-[(4-ethylphenyl)methyl]phenyl (CA INDEX NAME)

RN 433331-13-6 CAPLUS

CN β -D-Glucopyranoside, 2-[[4-(3-hydroxypropyl)phenyl]methyl]-3,5-dimethylphenyl (CA INDEX NAME)

Absolute stereochemistry.

RN 433331-14-7 CAPLUS

CN β -D-Glucopyranoside, 2-[[4-(2-hydroxyethyl)phenyl]methyl]-3,5-dimethylphenyl (CA INDEX NAME)

Absolute stereochemistry.

RN 433331-20-5 CAPLUS

CN β -D-Glucopyranoside, 2-[(4-methoxyphenyl)methyl]-3,5-dimethylphenyl (CA INDEX NAME)

RN 449146-45-6 CAPLUS

CN β -D-Glucopyranoside, 2-[[4-(2-hydroxyethyl)phenyl]methyl]-5-(hydroxymethyl)phenyl (CA INDEX NAME)

Absolute stereochemistry.

RN 449146-75-2 CAPLUS

CN β -D-Glucopyranoside, 2-[[4-[2-(phenylmethoxy)ethyl]phenyl]methyl]phenyl, 6-(ethyl carbonate) (9CI) (CA INDEX NAME)

CN β -D-Glucopyranoside, 2-[[4-(2-hydroxyethyl)phenyl]methyl]phenyl, 6-(ethyl carbonate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 449146-77-4 CAPLUS

CN β -D-Glucopyranoside, 2-[[4-[2-(phenylmethoxy)ethyl]phenyl]methyl]phenyl, 6-acetate (CA INDEX NAME)

Absolute stereochemistry.

RN 449146-78-5 CAPLUS

CN β -D-Glucopyranoside, 2-[[4-(2-hydroxyethyl)phenyl]methyl]phenyl, 6-acetate (CA INDEX NAME)

IT 449146-66-1P 449146-67-2P 449146-68-3P 449146-69-4P 449146-70-7P 449146-71-8P 449146-72-9P 449146-73-0P 449146-74-1P 449146-79-6P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of glucopyranosyloxybenzylbenzene derivs. as inhibitors of human SGLT2 activity for prevention or treatment of diseases caused by hyperglycemia)

RN 449146-66-1 CAPLUS

CN β -D-Glucopyranoside, 2-[(4-ethylphenyl)methyl]-5-(hydroxymethyl)phenyl, 6-(ethyl carbonate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 449146-67-2 CAPLUS

CN β -D-Glucopyranoside, 5-[(2,2-dimethyl-1-oxopropoxy)methyl]-2-[(4-ethylphenyl)methyl]phenyl (CA INDEX NAME)

RN 449146-68-3 CAPLUS CN β -D-Glucopyranoside, 2-[(4-ethylphenyl)methyl]-5- (hydroxymethyl)phenyl, 6-butanoate (CA INDEX NAME)

Absolute stereochemistry.

RN 449146-69-4 CAPLUS CN β -D-Glucopyranoside, 5-[(acetyloxy)methyl]-2-[(4-ethylphenyl)methyl]phenyl, 6-acetate (CA INDEX NAME)

Absolute stereochemistry.

RN 449146-70-7 CAPLUS

CN β -D-Glucopyranoside, 5-[[(ethoxycarbonyl)oxy]methyl]-2-[(4-ethylphenyl)methyl]phenyl (CA INDEX NAME)

Absolute stereochemistry.

RN 449146-71-8 CAPLUS

CN β -D-Glucopyranoside, 2-[(4-ethylphenyl)methyl]-5- (hydroxymethyl)phenyl, 6-hexanoate (CA INDEX NAME)

Absolute stereochemistry.

RN 449146-72-9 CAPLUS

CN β -D-Glucopyranoside, 2-[(4-ethylphenyl)methyl]-5- (hydroxymethyl)phenyl, 6-(2,2-dimethylpropanoate) (CA INDEX NAME)

RN 449146-73-0 CAPLUS CN β -D-Glucopyranoside, 2-[(4-ethylphenyl)methyl]-5- (hydroxymethyl)phenyl, 6-(2-methylpropyl carbonate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 449146-74-1 CAPLUS CN β -D-Glucopyranoside, 2-[(4-ethylphenyl)methyl]-5- (hydroxymethyl)phenyl, 6-(1-methylethyl carbonate) (9CI) (CA INDEX NAME)

RN 449146-79-6 CAPLUS

CN β -D-Glucopyranoside, 2-[[4-[2-(acetyloxy)ethyl]phenyl]methyl]phenyl, 6-acetate (CA INDEX NAME)

Absolute stereochemistry.

IT 363164-73-2P 433331-03-4P 433331-04-5P 433331-05-6P 433331-06-7P 433331-07-8P 433331-15-8P 433331-16-9P 433331-11-4P 433331-15-8P 433331-19-2P 433331-21-6P 433331-22-7P 433331-23-8P 433331-24-9P 433331-25-0P 433331-33-0P 433331-99-8P 433332-00-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of glucopyranosyloxybenzylbenzene derivs. as inhibitors of human SGLT2 activity for prevention or treatment of diseases caused by hyperglycemia)

RN 363164-73-2 CAPLUS

CN β -D-Glucopyranoside, 2-[[4-(phenylmethoxy)phenyl]methyl]phenyl (CA INDEX NAME)

Absolute stereochemistry.

RN 433331-03-4 CAPLUS

CN Benzoic acid, 4-[[2-(β -D-glucopyranosyloxy)phenyl]methyl]-, methyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 433331-04-5 CAPLUS CN β -D-Glucopyranoside, 2-[[4-(2-propen-1-yloxy)phenyl]methyl]phenyl (CA INDEX NAME)

Absolute stereochemistry.

RN 433331-05-6 CAPLUS CN β -D-Glucopyranoside, 2-[[4-[2-(phenylmethoxy)ethyl]phenyl]methyl]phenyl (CA INDEX NAME)

RN 433331-06-7 CAPLUS

CN Benzoic acid, 4-[[2-(β -D-glucopyranosyloxy)phenyl]methyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 433331-07-8 CAPLUS

CN Benzeneacetonitrile, 4-[[2-(β -D-glucopyranosyloxy)phenyl]methyl]- (CA INDEX NAME)

CN Benzamide, 4-[[2-(β -D-glucopyranosyloxy)phenyl]methyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 433331-09-0 CAPLUS

CN β -D-Glucopyranoside, 2-[[4-(dimethylamino)phenyl]methyl]phenyl (CA INDEX NAME)

Absolute stereochemistry.

RN 433331-11-4 CAPLUS

CN β -D-Glucopyranoside, 2-[[4-(2-hydroxyethyl)phenyl]methyl]-5-methoxyphenyl (CA INDEX NAME)

RN 433331-15-8 CAPLUS

CN β -D-Glucopyranoside, 2-[(4-ethylphenyl)methyl]-5-(methylamino)phenyl (CA INDEX NAME)

Absolute stereochemistry.

RN 433331-16-9 CAPLUS

CN Benzamide, 4-[(4-ethylphenyl)methyl]-3-(β -D-glucopyranosyloxy)- (CA INDEX NAME)

Absolute stereochemistry.

RN 433331-17-0 CAPLUS

CN β -D-Glucopyranoside, 2-[(4-ethylphenyl)methyl]-5- (methoxymethoxy)phenyl (CA INDEX NAME)

Absolute stereochemistry.

RN 433331-18-1 CAPLUS

CN β -D-Glucopyranoside, 2-[(4-ethylphenyl)methyl]-5-hydroxyphenyl (CA INDEX NAME)

Absolute stereochemistry.

RN 433331-19-2 CAPLUS

CN β -D-Glucopyranoside, 2-[(4-ethylphenyl)methyl]-5-(2-hydroxyethoxy)phenyl (CA INDEX NAME)

RN 433331-21-6 CAPLUS

CN Benzonitrile, 3-(β -D-glucopyranosyloxy)-4-[(4-methoxyphenyl)methyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 433331-22-7 CAPLUS

CN β -D-Glucopyranoside, 5-methoxy-2-[(4-methoxyphenyl)methyl]phenyl (CA INDEX NAME)

Absolute stereochemistry.

RN 433331-23-8 CAPLUS

CN Benzeneacetamide, 4-[(4-ethylphenyl)methyl]-3-(β -D-glucopyranosyloxy)- (CA INDEX NAME)

Absolute stereochemistry.

RN 433331-24-9 CAPLUS

CN Butanoic acid, $4-[4-[(4-\text{ethylphenyl})\text{methyl}]-3-(\beta-D-glucopyranosyloxy)\text{phenoxy}]-, ethyl ester (CA INDEX NAME)$

Absolute stereochemistry.

RN 433331-25-0 CAPLUS

CN β -D-Glucopyranoside, 5-(methoxymethyl)-2-[(4-methoxyphenyl)methyl]phenyl (CA INDEX NAME)

RN 433331-33-0 CAPLUS

CN 2-Propenoic acid, 3-[4-[[2-(β -D-glucopyranosyloxy)phenyl]methyl]pheny l]-, ethyl ester, (2E)- (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

RN 433331-99-8 CAPLUS

CN β -D-Glucopyranoside, 5-methoxy-2-[[4-[2-(methoxymethoxy)ethyl]phenyl] methyl]phenyl (CA INDEX NAME)

RN 433332-00-4 CAPLUS CN β -D-Glucopyranoside, 2-[(4-ethylphenyl)methyl]-5-[2-(phenylmethoxy)ethoxy]phenyl (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 31 OF 56 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2002:428920 CAPLUS

DOCUMENT NUMBER: 137:6353

TITLE: Preparation of 2-(glucopyranosyloxy)benzylbenzene

derivatives having activity for inhibiting human SGLT2 (sodium-dependent glucose-transporter 2), medicinal compositions containing the same, and intermediates in

the production thereof

INVENTOR(S): Fujikura, Hideki; Nishimura, Toshihiro; Fushimi,

Nobuhiko; Tatani, Kazuya; Kikuchi, Norihiko; Katsuno,

Kenji; Isaji, Masayuki

PATENT ASSIGNEE(S): Kissei Pharmaceutical Co., Ltd., Japan

SOURCE: PCT Int. Appl., 91 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA'	PATENT NO.						DATE			APPLICATION NO.					DATE				
WO	2002044192			A1 20020606				WO :	2001-		20011120								
	W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	AZ,	BA,	BB	, BG,	BR,	BY,	BZ,	CA,	CH,	CN,		
		CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC	, EE,	ES,	FΙ,	GB,	GD,	GE,	GH,		
		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE	, KG,	KR,	KΖ,	LC,	LK,	LR,	LS,		
		LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW	, MX,	MZ,	NO,	NZ,	OM,	PH,	PL,		
		PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL	, TJ,	TM,	TR,	TT,	TZ,	UA,	UG,		
		US,	UZ,	VN,	YU,	ZA,	ZM,	ZW											
	RW:	GH,	GM,	ΚE,	LS,	MW,	MZ,	SD,	SL,	SZ	, TZ,	UG,	ZM,	ZW,	AT,	BE,	CH,		
		CY,	DE,	DK,	ES,	FI,	FR,	GB,	GR,	IE,	, IT,	LU,	MC,	NL,	PT,	SE,	TR,		
		BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ	, GW,	ML,	MR,	ΝE,	SN,	TD,	ΤG		
CA	A 2429833				A1	2002	0606		CA :	2001-									
_	2002023127									_									
EP	1344	4780			A1	A1 20030917				EP 2001-998555						20011	120		
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR	, IT,	LI,	LU,	NL,	SE,	MC,	PT,		
		,		,	,	,	RO,	,	,		•								
TW	2905	56			В	2007	1201		TW :	2001-		20011129							
US	2004	0063	170		A1		2004	0401		US :	2003-		20031006						
	2005									US :	2004-	9784	13		4	20041	102		
US	7129	381			В2		2006	1031											
	US 20050113315			A1		2005	0526			2004-		_			20041				
RIORIT	ORITY APPLN. INFO.:									-	2000-		-			20001			
											2000-					20001			
											2001-					20011			
										US :	2003-	4329	05		A3 2	20031	006		
ים סים שי	IED CUIDCE(C).					ידעכ	137.	6252											

Ι

OTHER SOURCE(S): MARPAT 137:6353

$$R^{1}$$
 R^{2}
 R^{3}
 R^{3}
 R^{3}
 R^{4}
 R^{4}
 R^{4}
 R^{4}
 R^{4}

AB 2-Benzylphenyl β -D-glucopyranoside derivs, represented by the following general formula (I) and pharmacol. acceptable salts thereof [wherein R1 = H, HO, NH2, mono- or di(lower alkyl)amino, CONH2, lower alkyl, lower alkoxy, hydroxy-lower alkyl, hydroxy-lower alkoxy, lower alkoxy-lower alkyl, lower alkoxy-lower alkoxy, carbamoyl-lower alkyl, lower alkoxycarbonyl-lower alkoxy, carboxy-lower alkyl, carboxy-lower alkoxy; R2 = H, lower alkyl; R3 = lower alkyl, lower alkoxy, lower alkylthio, hydroxy-lower alkyl, hydroxy-lower alkoxy, hydroxy-lower alkylthio, lower alkoxy-lower alkyl, lower alkoxy-lower alkoxy, lower alkoxy-lower alkylthio, lower alkenyloxy, aralkyloxy, hydroxy-lower alkenyl, CO2H, lower alkoxycarbonyl, cyano, aralkyloxy-lower alkyl, cyano-lower alkyl, CONH2, carbamoyl-lower alkyl, NH2, mono- or di(lower alkyl) amino, lower alkoxycarbonyl-lower alkyl, lower alkoxycarbonyl-lower alkyl, lower alkoxycarbonyl-lower alkoxy, carboxy-lower alkyl, carboxy-lower alkoxy; provided that when R1 is H or hydroxy-lower alkoxy and R2 is H, then R3 is not lower alkyl, lower alkoxy, lower alkylthio, hydroxy-lower alkyl, hydroxy-lower alkoxy, hydroxy-lower alkylthio, lower alkoxy-lower alkyl, lower alkoxy-lower alkoxy, or lower alkoxy-lower alkylthio] are prepared Because of having a human SGLT2 activity inhibitory effect, these compds. inhibit reabsorption of sugar in kidney, promote the secretion of excess sugar into urine, and thereby exhibit excellent blood sugar-lowering activity and are useful as preventives or remedies for diseases caused by hyperglycemia such as diabetes, diabetic complications, and obesity. Thus, to a solution of 4.0 g 2-(4-methoxybenzyl)-3,5dimethylphenol and 8.9 g 2,3,4,6-tetra-O-acetyl- α -D-glucopyranosyl trichloroacetimidate in 100 mL CH2Cl2 was added 2.5 ML BF3.0Et2 and stirred at room temperature for 1 h to give 7.8 g 2-(4-methoxybenzyl)-3,5dimethylphenyl 2,3,4,6-tetra-O-acetyl- β -D-glucopyranoside which (7.4 g) was suspended in 150 mL ethanol, treated with 65 mL 2 M aqueous NaOH, and stirred at room temperature for 2 h to give 5.2 g 2-(4-methoxybenzyl)-3,5dimethylphenyl β -D-glucopyranoside (II). II and 5-amino-2-(4ethylbenzyl)phenyl β -D-glucopyranoside in vitro inhibited the uptake of Me α -D-glucopyranoside in COS-7 cells over-expressing human SGLT-2 with IC50 of 290 and 10 nM, resp. II increased the urinary secretion of glucose from 15 mg/24 h/200 g body weight at 0.1 mg/kg i.v to 288 mg/24 h/200 g body weight at 10 mg/kg in male SD rats. 433331-17-0P 433331-18-1P RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses) (preparation of (glucopyranosyloxy)benzylbenzene derivs. having activity for inhibiting human SGLT2 as preventives or remedies for diseases caused by hyperglycemia such as diabetes, diabetic complications, and obesity) 433331-17-0 CAPLUS RN β -D-Glucopyranoside, 2-[(4-ethylphenyl)methyl]-5-CN

Absolute stereochemistry.

(methoxymethoxy) phenyl (CA INDEX NAME)

RN 433331-18-1 CAPLUS

CN β -D-Glucopyranoside, 2-[(4-ethylphenyl)methyl]-5-hydroxyphenyl (CA INDEX NAME)

Absolute stereochemistry.

ΙT

RN

```
363164-73-2P 433331-02-3P 433331-03-4P
433331-04-5P 433331-05-6P 433331-06-7P
433331-07-8P 433331-08-9P 433331-09-0P
433331-11-4P 433331-12-5P 433331-13-6P
433331-14-7P 433331-15-8P 433331-16-9P
433331-19-2P 433331-20-5P 433331-21-6P
433331-22-7P 433331-23-8P 433331-24-9P
433331-25-0P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
(Uses)
   (preparation of (glucopyranosyloxy) benzylbenzene derivs. having activity for
   inhibiting human SGLT2 as preventives or remedies for diseases caused
```

by hyperglycemia such as diabetes, diabetic complications, and obesity) 363164-73-2 CAPLUS

CN β -D-Glucopyranoside, 2-[[4-(phenylmethoxy)phenyl]methyl]phenyl (CA INDEX NAME)

RN 433331-02-3 CAPLUS CN β -D-Glucopyranoside, 2-[[4-[(1E)-3-hydroxy-1-propen-1-y1]phenyl]methyl]phenyl (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

RN 433331-03-4 CAPLUS CN Benzoic acid, 4-[[2-(β -D-glucopyranosyloxy)phenyl]methyl]-, methyl ester (CA INDEX NAME)

RN 433331-04-5 CAPLUS

CN β -D-Glucopyranoside, 2-[[4-(2-propen-1-yloxy)phenyl]methyl]phenyl (CA INDEX NAME)

Absolute stereochemistry.

RN 433331-05-6 CAPLUS

CN β -D-Glucopyranoside, 2-[[4-[2-(phenylmethoxy)ethyl]phenyl]methyl]phenyl (CA INDEX NAME)

RN 433331-06-7 CAPLUS

CN Benzoic acid, 4-[[2-(β -D-glucopyranosyloxy)phenyl]methyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 433331-07-8 CAPLUS

CN Benzeneacetonitrile, 4-[[2-(β -D-glucopyranosyloxy)phenyl]methyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 433331-08-9 CAPLUS

CN Benzamide, 4-[[2-(β -D-glucopyranosyloxy)phenyl]methyl]- (CA INDEX NAME)

RN 433331-09-0 CAPLUS

CN β -D-Glucopyranoside, 2-[[4-(dimethylamino)phenyl]methyl]phenyl (CA INDEX NAME)

Absolute stereochemistry.

RN 433331-11-4 CAPLUS

CN β -D-Glucopyranoside, 2-[[4-(2-hydroxyethyl)phenyl]methyl]-5-methoxyphenyl (CA INDEX NAME)

RN 433331-12-5 CAPLUS

CN β -D-Glucopyranoside, 5-amino-2-[(4-ethylphenyl)methyl]phenyl (CA INDEX NAME)

Absolute stereochemistry.

RN 433331-13-6 CAPLUS

CN β -D-Glucopyranoside, 2-[[4-(3-hydroxypropyl)phenyl]methyl]-3,5-dimethylphenyl (CA INDEX NAME)

Absolute stereochemistry.

RN 433331-14-7 CAPLUS

CN β -D-Glucopyranoside, 2-[[4-(2-hydroxyethyl)phenyl]methyl]-3,5-dimethylphenyl (CA INDEX NAME)

RN 433331-15-8 CAPLUS

CN β -D-Glucopyranoside, 2-[(4-ethylphenyl)methyl]-5-(methylamino)phenyl (CA INDEX NAME)

Absolute stereochemistry.

RN 433331-16-9 CAPLUS

CN Benzamide, 4-[(4-ethylphenyl)methyl]-3-(β -D-glucopyranosyloxy)- (CA INDEX NAME)

Absolute stereochemistry.

RN 433331-19-2 CAPLUS

CN β -D-Glucopyranoside, 2-[(4-ethylphenyl)methyl]-5-(2-hydroxyethoxy)phenyl (CA INDEX NAME)

Absolute stereochemistry.

RN 433331-20-5 CAPLUS

CN β -D-Glucopyranoside, 2-[(4-methoxyphenyl)methyl]-3,5-dimethylphenyl (CA INDEX NAME)

Absolute stereochemistry.

RN 433331-21-6 CAPLUS

CN Benzonitrile, 3-(β -D-glucopyranosyloxy)-4-[(4-methoxyphenyl)methyl]- (CA INDEX NAME)

RN 433331-22-7 CAPLUS

CN β -D-Glucopyranoside, 5-methoxy-2-[(4-methoxyphenyl)methyl]phenyl (CA INDEX NAME)

Absolute stereochemistry.

RN 433331-23-8 CAPLUS

CN Benzeneacetamide, 4-[(4-ethylphenyl)methyl]-3-(β -D-glucopyranosyloxy)- (CA INDEX NAME)

RN 433331-24-9 CAPLUS

CN Butanoic acid, $4-[4-[(4-\text{ethylphenyl})\text{methyl}]-3-(\beta-D-glucopyranosyloxy)phenoxy]-, ethyl ester (CA INDEX NAME)$

Absolute stereochemistry.

RN 433331-25-0 CAPLUS

CN β -D-Glucopyranoside, 5-(methoxymethyl)-2-[(4-methoxyphenyl)methyl]phenyl (CA INDEX NAME)

Absolute stereochemistry.

IT 433331-33-0P 433331-99-8P 433332-00-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of (glucopyranosyloxy)benzylbenzene derivs. having activity for inhibiting human SGLT2 as preventives or remedies for diseases caused by hyperglycemia such as diabetes, diabetic complications, and obesity)

RN 433331-33-0 CAPLUS

CN 2-Propenoic acid, 3-[4-[[2-(β -D-glucopyranosyloxy)phenyl]methyl]pheny 1]-, ethyl ester, (2E)- (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

RN 433331-99-8 CAPLUS

CN β -D-Glucopyranoside, 5-methoxy-2-[[4-[2-(methoxymethoxy)ethyl]phenyl] methyl]phenyl (CA INDEX NAME)

Absolute stereochemistry.

RN 433332-00-4 CAPLUS

CN β -D-Glucopyranoside, 2-[(4-ethylphenyl)methyl]-5-[2-(phenylmethoxy)ethoxy]phenyl (CA INDEX NAME)

REFERENCE COUNT: 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 32 OF 56 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2002:390209 CAPLUS

DOCUMENT NUMBER: 137:206649

TITLE: Complete LC/MS analysis of a Tinnevelli senna pod

extract and subsequent isolation and identification of

two new benzophenone glucosides

AUTHOR(S): Terreaux, Christian; Wang, Qi; Ioset, Jean-Robert;

Ndjoko, Karine; Grimminger, Wolf; Hostettmann, Kurt

CORPORATE SOURCE: Institut de Pharmacognosie et Phytochimie, Universite

de Lausanne, Lausanne, CH-1015, Switz. Planta Medica (2002), 68(4), 349-354

CODEN: PLMEAA; ISSN: 0032-0943

PUBLISHER: Georg Thieme Verlag

DOCUMENT TYPE: Journal LANGUAGE: English

AB The hydroalcoholic extract of Tinnevelli senna is widely used as a laxative phytomedicine. In order to improve the knowledge of the chemical composition

of

SOURCE:

this extract, LC/MS and LC/MSn studies were performed, allowing the online identification of most of the known constituents, i.e., flavonoids, anthraquinones and the typical dianthronic sennosides. However, the identity of four compds. could not be ascertained online under the given LC/MS conditions. These substances were isolated and their structures elucidated as kaempferol, the naphthalene derivative tinnevellin 8-glucoside and two new carboxylated benzophenone glucosides.

IT 452306-59-1 452306-60-4

RL: ANT (Analyte); NPO (Natural product occurrence); RCT (Reactant); ANST (Analytical study); BIOL (Biological study); OCCU (Occurrence); RACT (Reactant or reagent)

(LC/MS anal. of Tinnevelli senna pod extract with isolation and identification of two new benzophenone glucosides)

RN 452306-59-1 CAPLUS

CN Benzoic acid, $2-[2-(\beta-D-glucopyranosyloxy)-6-hydroxybenzoyl]-3-hydroxy-5-(hydroxymethyl)- (CA INDEX NAME)$

Absolute stereochemistry.

RN 452306-60-4 CAPLUS

CN 1,3-Benzenedicarboxylic acid, $4-[2-(\beta-D-glucopyranosyloxy)-6-hydroxybenzoyl]-5-hydroxy- (CA INDEX NAME)$

REFERENCE COUNT:

THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 33 OF 56 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2002:275999 CAPLUS

DOCUMENT NUMBER: 136:295018

TITLE: Preparation of glucopyranosyloxybenzylbenzene

derivatives as inhibitors of human SGLT2

(sodium-dependent glucose-transporter 2) activity and

medicinal compositions containing the same

INVENTOR(S): Fujikura, Hideki; Fushimi, Nobuhiko; Nishimura,

Toshihiro; Tatani, Kazuya; Isaji, Masayuki

PATENT ASSIGNEE(S): Kissei Pharmaceutical Co., Ltd., Japan

SOURCE: PCT Int. Appl., 44 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PAT		KIND DATE				APPLICATION NO.						DATE							
										WO 2001-JP8239						20010921			
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BE	3, BG,	BR,	BY,	BZ,	CA,	CH,	CN,		
											EE,								
											, KG,								
											V, MX,								
											J, TM,								
		UΖ,	VN,	YU,	ZA,	ZW													
	RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ	Z, TZ,	UG,	ZW,	AT,	BE,	CH,	CY,		
											LU,								
		ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,		V, ML,								
CA	2423		A1 20020411					CA	2001-	2423	20010921								
ΑU	2001	57		A 20020415					AU	2001-	9025	20010921 20010921							
AU	2001	A2 20020415				AU 2001-290257						20010921							
AU	CA 2423568 AU 2001090257 AU 2001290257 AU 2001290257				В2		2007	0830											
	1329					EP 2001-970186						20010921							
EP 1329456						2006													
	R:										R, IT,	LI,	LU,	NL,	SE,	MC,	PT,		
							RO,												
BR 2001014310										2001-									
HU 2003001178				A2															
NZ 524917 JP 3798375				А						2001-									
JP 3798375				B2 20060719					JΡ	2002-	5324		20010921						
AT 335753 ES 2269456 ZA 2003002283 BG 107674 NO 2003001407				T 20060915					AT	2001-	9701		20010921						
ES 2269456				T3 20070401 A 20050527					ES	2001-		20010921 20030324							
ZA 2003002283				A					ZA	2003-	2283			2					
BG 107674				A 20040130					BG	2003	10/6		20030326						
NO 200300140/				A 20030430 A 20040504				NO 2003-1407 MX 2003-PA2779						20030327					
								MX 2003-PA2779 US 2003-381846						20030328					
US 20040018998 US 6872706							US	2003-	3818	20030729									
										1112	2004	1041	0.0		2	0040	C00		
HK 1061037				A1 20070608			HK 2004-104109 US 2004-916548												
US 20050065098 TW 284641														20040812 20090105					
ORITY APPLN. INFO.:					В 20070801					TW 2001-90124049 JP 2000-301523									
OKTI]	• •						WO 2001-JP8239												
											2001-					0010			
DD 00		MADE	- 7 m	126.	00 F 0.		UD	2005	2010	10			0000	1 4)					

OTHER SOURCE(S): MARPAT 136:295018

GΙ

Ι

AΒ Glucopyranosyloxybenzylbenzene derivs. represented by the following general formula (I; wherein P represents a group constituting a prodrug; and R represents lower alkyl, lower alkoxy, lower alkylthio, lower alkoxy lower alkyl, lower alkoxy lower alkoxy or lower alkoxy lower alkylthio) are prepared These compds. have an improved oral absorbability, exert an excellent effect of inhibiting human SGLT2 activity in vivo and, therefore, are useful as preventives or remedies for diseases caused by hyperglycemia such as diabetes, complication of diabetes, and obesity. Thus, to a solution of 0.51 g 2-(4-ethylthiobenzyl) and 2.4 g1,2,3,4,6-pent-O-acetyl- β -D-glucopyranose in 2.7 mL CH2Cl2 was added 0.78 mL BF3.Et20 and stirred at room temperature for 9 h, followed by treatment of the peracetylated glucoside with NaOMe/MeOH at 25° for 18 h, 0.51 g 2-(4-ethylthiobenzyl)phenyl β -D-glucopyranoside (II). II and 2-(4-methoxybenzyl)phenyl β -D-glucopyranoside (III) in vitro showed IC50 of 110 and 350 nM, resp., for inhibiting the uptake of Me α -D-glucopyranoside in COS-7 cells over-expressing human SGLT2. 6-O-acyl III derivs. were prepared and tested for oral absorbability and bioavailability. When administered p.o. or i.v. to rats, bioavailability of III and 2-(4-methoxybenzyl)phenyl 6-O-hexanoyl- β -D-glucopyranoside was 15 and 61%, resp.

IT 360775-96-8P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(preparation of glucopyranosyloxybenzylbenzene derivs. as inhibitors of human SGLT2 activity for prevention or treatment of diseases caused by hyperglycemia)

RN 360775-96-8 CAPLUS

CN β -D-Glucopyranoside, 2-[(4-methoxyphenyl)methyl]phenyl (CA INDEX NAME)

IT 360775-97-9P 360775-98-0P 360775-99-1P 360776-00-7P 360776-01-8P 360776-07-4P 408504-26-7P 408504-27-8P 408504-28-9P 408504-29-0P 408504-30-3P 408504-31-4P 408504-32-5P 408504-33-6P 408504-34-7P 408504-35-8P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of glucopyranosyloxybenzylbenzene derivs. as inhibitors of human SGLT2 activity for prevention or treatment of diseases caused by hyperglycemia)

RN 360775-97-9 CAPLUS

CN β -D-Glucopyranoside, 2-[(4-methylphenyl)methyl]phenyl (CA INDEX NAME)

Absolute stereochemistry.

RN 360775-98-0 CAPLUS CN β -D-Glucopyranoside, 2-[(4-ethylphenyl)methyl]phenyl (CA INDEX NAME)

RN 360775-99-1 CAPLUS

CN β -D-Glucopyranoside, 2-[[4-(2-methylpropyl)phenyl]methyl]phenyl (CA INDEX NAME)

Absolute stereochemistry.

RN 360776-00-7 CAPLUS

CN β -D-Glucopyranoside, 2-[(4-ethoxyphenyl)methyl]phenyl (CA INDEX NAME)

Absolute stereochemistry.

RN 360776-01-8 CAPLUS

CN β -D-Glucopyranoside, 2-[[4-(1-methylethoxy)phenyl]methyl]phenyl (CA INDEX NAME)

Absolute stereochemistry.

RN 360776-07-4 CAPLUS

CN β -D-Glucopyranoside, 2-[[4-(ethylthio)phenyl]methyl]phenyl (CA INDEX NAME)

Absolute stereochemistry.

RN 408504-26-7 CAPLUS

CN β -D-Glucopyranoside, 2-[(4-methoxyphenyl)methyl]phenyl, 6-(ethyl carbonate) (CA INDEX NAME)

RN 408504-27-8 CAPLUS

CN β -D-Glucopyranoside, 2-[(4-methoxyphenyl)methyl]phenyl, 6-(methyl carbonate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 408504-28-9 CAPLUS

CN β -D-Glucopyranoside, 2-[(4-methoxyphenyl)methyl]phenyl, 6-(2-methoxyethyl carbonate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 408504-29-0 CAPLUS

CN β -D-Glucopyranoside, 2-[(4-methoxyphenyl)methyl]phenyl, 6-hexanoate (CA INDEX NAME)

Absolute stereochemistry.

RN 408504-30-3 CAPLUS

CN β -D-Glucopyranoside, 2-[(4-methoxyphenyl)methyl]phenyl, 6-propanoate (CA INDEX NAME)

Absolute stereochemistry.

RN 408504-31-4 CAPLUS

CN β -D-Glucopyranoside, 2-[(4-methoxyphenyl)methyl]phenyl, 6-butanoate (CA INDEX NAME)

RN 408504-32-5 CAPLUS CN β -D-Glucopyranoside, 2-[(4-methoxyphenyl)methyl]phenyl, 6-acetate (CA INDEX NAME)

Absolute stereochemistry.

RN 408504-33-6 CAPLUS CN β -D-Glucopyranoside, 2-[(4-methoxyphenyl)methyl]phenyl, 6-(2-methylpropanoate) (CA INDEX NAME)

Absolute stereochemistry.

RN 408504-34-7 CAPLUS

CN β -D-Glucopyranoside, 2-[(4-methoxyphenyl)methyl]phenyl, 6-(ethyl butanedioate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 408504-35-8 CAPLUS

CN β -D-Glucopyranoside, 2-[(4-methoxyphenyl)methyl]phenyl, 6-(1-methylethyl carbonate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT:

13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 34 OF 56 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2002:121223 CAPLUS

DOCUMENT NUMBER: 136:306735

TITLE: Dimeric stilbene glycosides from Polygonum cuspidatum AUTHOR(S): Xiao, Kai; Xuan, Lijiang; Xu, Yaming; Bai, Donglu;

Zhong, Dexin; Wu, Houming; Wang, Zhonghua; Zhang,

Naixia

CORPORATE SOURCE: Shanghai Institute of Materia Medica, Chinese Academy

of Sciences, Shanghai, 200031, Peop. Rep. China

SOURCE: European Journal of Organic Chemistry (2002), (3),

564-568

CODEN: EJOCFK; ISSN: 1434-193X

PUBLISHER: Wiley-VCH Verlag GmbH

DOCUMENT TYPE: Journal LANGUAGE: English

GΙ

AB Two dimeric stilbene glycosides (e.g. I) were isolated from an aqueous extract of

the root of Polygonum cuspidatum. Their structures were established based on chemical evidence and spectroscopic techniques, including extensive 2D NMR methods. One of these glycosides possesses a novel four-membered ring. Both compds. exhibit strong inhibition of lipid peroxidn., but show no cytotoxic, DNA-cleavage activities and no inhibition of protein tyrosine phosphatase 1B (PTP1B).

IT 411234-35-0P

RL: BSU (Biological study, unclassified); NPO (Natural product occurrence); PRP (Properties); PUR (Purification or recovery); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation) (dimeric stilbene glycosides from Polygonum cuspidatum)

RN 411234-35-0 CAPLUS

CN β -D-Glucopyranoside, 3-[[rel-(1R,2S)]-2-[2-(β -D-glucopyranosyloxy)-4-hydroxy-6-[(1E)-2-(4-hydroxyphenyl)ethenyl]phenyl]-1-hydroxy-2-(4-hydroxyphenyl)ethyl]-5-hydroxyphenyl (9CI) (CA INDEX NAME)

REFERENCE COUNT:

29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 35 OF 56 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2001:747805 CAPLUS

DOCUMENT NUMBER: 135:273163

TITLE: Preparation of O-aryl glucosides as antidiabetic

agents and SGLT2 inhibitors

Washburn, William N.; Sher, Philip M.; Wu, Gang INVENTOR(S):

Bristol-Myers Squibb Company, USA PATENT ASSIGNEE(S):

SOURCE: PCT Int. Appl., 78 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.					KIND DATE			APPLICATION NO.							DATE					
									WO 2001-US10092											
	₩:	CO, HR, LT, RU,	CR, HU, LU,	CU, ID, LV, SE,	CZ, IL, MA, SG,	DE, IN, MD,	AU, DK, IS, MG, SK,	DM, JP, MK,	DZ, KE, MN,	EE Ko Mv	E, 3, V,	ES, KP, MX,	FI, KR, MZ,	GB, KZ, NO,	GD, LC, NZ,	GE, LK, PL,	GH, LR, PT,	GM, LS, RO,		
	RW:	DE,	DK,	ES,	FΙ,	FR,	MZ, GB, GA,	GR,	ΙE,	ΙΊ	Γ,	LU,	MC,	NL,	PT,	SE,	TR,			
US	20020111315				A1		2002	0815	US 2001-791512						20010223					
US	6683056				B2		2004	0127								_	0010	000		
	2404373				A1	CA 2001-2404373							20010329							
	1268502 1268502				R1 20030102 R1 20060201				CA 2001-2404373 EP 2001-922840							20010329				
Lil		AT.	BE.	CH.	DE.	DK.	ES,	FR.	GB.	GF	۲.	TT.	Т.Т.	T.II.	NI.	SE.	MC.	PT.		
				LT.	T.V.	FT.	RO.	MK.	CY.	ΑT		TR					110,	,		
	J 2003001513				A2	2 20030929 HU 2003-1513								20010329						
HU	2003	0015	13		А3		2007	ひちつは												
JΡ	2004500416				Τ		2004	0108		JP 2001-572523						2	0010			
BR	2001009326				A3 20070529 T 20040108 A 20040330					JP 2001-572523 BR 2001-9326 NZ 2001-520822 RU 2002-126586 AT 2001-922840 ES 2001-922840 AU 2001-249598							20010329			
NΖ	520822				A		2005	0324		NZ 2001-520822							20010329			
	2269540				C2		2006	0210		RU 2002-126586							20010329			
	316976			T		AI 2001-922840						20010329								
	2258079			A 20050324 C2 20060210 T 20060215 T3 20060816 B2 20060907					L5 2001-922840						20010329					
	2001249598			BZ 20060907					AU 2001-249390						20010329 20020902					
	2002007030			11 20051202				IN 2002-7030						20020902						
	2002MN01246 2002004642			A 20050304				NO 2002-1101240						20020912						
	2002004042 2002DD09522			A 20021121 A 20030514				ZA 2002-7030 IN 2002-MN1246 NO 2002-4642 MX 2002-PA9522 KR 2002-712976 HK 2003-101354						20020927						
KR	X 2002PA09522 R 798203			B1 20080124				KR 2002 1713322						20020927						
	HK 1049168					A1 20060428				HK 2003-101354						20030221				
PRITY APPLN. INFO.:					111		2000	0 120		0.5	20	00-	1930 US10	ノモニ		F 2	0000	330		
ER SOURCE(S):					MARPAT 135:27316						_ 0	-	0							

GΙ

O-aryl glucosides I wherein Y is heteroaryl; A is -O(CH2)m, S, -NH(CH2)m, or (CH2)n where n is 0-3 and m is 0-2; and R1-R4 are independently H, OH, alkoxy, alkyl, halogen, two of R1-R4 together with the carbons to which they are attached can form an annelated five, six, or seven membered carbocycle or heterocycle which may contain 1 to 4 heteroatoms, were prepared as antidiabetic agents and SGLT2 inhibitors. A method is also provided for treating diabetes and related diseases employing an SGLT2 inhibiting amount of the above compound alone or in combination with one, two or more other antidiabetic agents, and/or one, two or more hypolipidemic agents. Thus, I (R1-R4 = H, A = CH2, Y = C6H5-Me-4) was prepared as antidiabetic and SGLT2 inhibitor (no data).

Ι

ΙT 55325-19-4P 360775-96-8P 360775-97-9P 360775-98-0P 363164-68-5P 363164-69-6P 363164-70-9P 363164-71-0P 363164-72-1P 363164-73-2P 363164-74-3P 363164-75-4P 363164-76-5P 363164-77-6P 363164-78-7P 363164-79-8P 363164-80-1P 363164-81-2P 363164-82-3P 363164-83-4P 363164-84-5P 363164-85-6P 363164-86-7P 363164-87-8P 363164-88-9P 363164-89-0P 363164-90-3P 363164-91-4P 363164-92-5P 363164-93-6P 363164-94-7P 363164-95-8P 363164-96-9P 363164-97-0P 363164-98-1P 363164-99-2P 363165-00-8P 363165-01-9P 363165-02-0P 363165-03-1P 363165-04-2P 363165-05-3P 363165-06-4P 363165-07-5P 363165-08-6P 363165-09-7P 363165-28-0P 363165-30-4P 363165-31-5P 363165-32-6P 363165-33-7P 363165-34-8P 363165-35-9P 363165-36-0P 363165-37-1P 363165-38-2P 363165-39-3P 363165-40-6P 363165-41-7P 363165-42-8P 363165-43-9P 363165-44-0P 363165-45-1P 363165-46-2P 363165-47-3P 363165-48-4P 363165-49-5P 363165-50-8P 363165-51-9P 363165-52-0P 363165-53-1P 363165-54-2P 363165-55-3P 363165-56-4P 363165-57-5P 363165-58-6P 363165-59-7P 363165-60-0P 363165-61-1P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); IMF (Industrial manufacture); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of O-aryl glucosides as antidiabetic agents and SGLT2 inhibitors)

RN 55325-19-4 CAPLUS

CN β -D-Glucopyranoside, 4-chloro-2-(phenylmethyl)phenyl (CA INDEX NAME)

Absolute stereochemistry.

RN 360775-96-8 CAPLUS

CN β -D-Glucopyranoside, 2-[(4-methoxyphenyl)methyl]phenyl (CA INDEX NAME)

Absolute stereochemistry.

RN 360775-97-9 CAPLUS

CN β -D-Glucopyranoside, 2-[(4-methylphenyl)methyl]phenyl (CA INDEX NAME)

RN 360775-98-0 CAPLUS CN β -D-Glucopyranoside, 2-[(4-ethylphenyl)methyl]phenyl (CA INDEX NAME)

Absolute stereochemistry.

RN 363164-68-5 CAPLUS CN $\beta\text{-D-Glucopyranoside, 2-(phenylmethyl)phenyl (CA INDEX NAME)}$

Absolute stereochemistry.

RN 363164-69-6 CAPLUS CN β -D-Glucopyranoside, 2-[(2-hydroxyphenyl)methyl]phenyl (CA INDEX NAME)

Absolute stereochemistry.

RN 363164-70-9 CAPLUS

CN β -D-Glucopyranoside, 2-[[4-(1,1-dimethylethyl)phenyl]methyl]phenyl (CA INDEX NAME)

Absolute stereochemistry.

RN 363164-71-0 CAPLUS

CN β -D-Glucopyranoside, 2-[[4-(methylthio)phenyl]methyl]phenyl (CA INDEX NAME)

Absolute stereochemistry.

RN 363164-72-1 CAPLUS

CN β -D-Glucopyranoside, 2-([1,1'-biphenyl]-4-ylmethyl)phenyl (CA INDEX NAME)

RN 363164-73-2 CAPLUS

CN β -D-Glucopyranoside, 2-[[4-(phenylmethoxy)phenyl]methyl]phenyl (CA INDEX NAME)

Absolute stereochemistry.

RN 363164-74-3 CAPLUS

CN β -D-Glucopyranoside, 2-[[4-(1-methylethyl)phenyl]methyl]phenyl (CA INDEX NAME)

Absolute stereochemistry.

RN 363164-75-4 CAPLUS

CN β -D-Glucopyranoside, 2-[(4-chlorophenyl)methyl]phenyl (CA INDEX NAME)

Absolute stereochemistry.

RN 363164-76-5 CAPLUS

CN β -D-Glucopyranoside, 2-[[4-(methylsulfonyl)phenyl]methyl]phenyl (CA INDEX NAME)

Absolute stereochemistry.

RN 363164-77-6 CAPLUS

CN β -D-Glucopyranoside, 2-[[4-(trifluoromethyl)phenyl]methyl]phenyl (CA INDEX NAME)

RN 363164-78-7 CAPLUS

CN β -D-Glucopyranoside, 2-[[4-(trifluoromethoxy)phenyl]methyl]phenyl (CA INDEX NAME)

Absolute stereochemistry.

RN 363164-79-8 CAPLUS

CN Acetic acid, [4-[[2-(β -D-glucopyranosyloxy)phenyl]methyl]phenoxy]- (9CI) (CA INDEX NAME)

CN Acetic acid, [4-[[2-(β -D-glucopyranosyloxy)phenyl]methyl]phenoxy]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 363164-81-2 CAPLUS

CN Acetamide, N,N-diethyl-2-[4-[[2-(β -D-glucopyranosyloxy)phenyl]methyl] phenoxy]- (CA INDEX NAME)

Absolute stereochemistry.

RN 363164-82-3 CAPLUS

CN β -D-Glucopyranoside, 2-[[4-[2-(dimethylamino)ethoxy]phenyl]methyl]phenyl (CA INDEX NAME)

RN 363164-83-4 CAPLUS

CN β -D-Glucopyranoside, 2-[[4-(2-phenylethenyl)phenyl]methyl]phenyl (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry unknown.

RN 363164-84-5 CAPLUS

CN β -D-Glucopyranoside, 2-[(3-methylphenyl)methyl]phenyl (CA INDEX NAME)

RN 363164-85-6 CAPLUS

CN β -D-Glucopyranoside, 2-[(3-methoxyphenyl)methyl]phenyl (CA INDEX NAME)

Absolute stereochemistry.

RN 363164-86-7 CAPLUS

CN β -D-Glucopyranoside, 2-[(2-methoxyphenyl)methyl]phenyl (CA INDEX NAME)

Absolute stereochemistry.

RN 363164-87-8 CAPLUS

CN β -D-Glucopyranoside, 2-[(2-ethylphenyl)methyl]phenyl (CA INDEX NAME)

RN 363164-88-9 CAPLUS

CN β -D-Glucopyranoside, 2-[(2,4-dimethylphenyl)methyl]phenyl (CA INDEX NAME)

Absolute stereochemistry.

RN 363164-89-0 CAPLUS

CN β -D-Glucopyranoside, 2-[(3-chloro-4-methylphenyl)methyl]phenyl (CA INDEX NAME)

RN 363164-90-3 CAPLUS

CN β -D-Glucopyranoside, 2-(1,3-benzodioxol-5-ylmethyl)phenyl (CA INDEX NAME)

Absolute stereochemistry.

RN 363164-91-4 CAPLUS

CN β -D-Glucopyranoside, 3-chloro-2-(phenylmethyl)phenyl (CA INDEX NAME)

Absolute stereochemistry.

RN 363164-92-5 CAPLUS

CN β -D-Glucopyranoside, 3-methyl-2-(phenylmethyl)phenyl (CA INDEX NAME)

Absolute stereochemistry.

RN 363164-93-6 CAPLUS

CN β -D-Glucopyranoside, 4-methyl-2-(phenylmethyl)phenyl (CA INDEX NAME)

Absolute stereochemistry.

RN 363164-94-7 CAPLUS CN β -D-Glucopyranoside, 4-fluoro-2-(phenylmethyl)phenyl (CA INDEX NAME)

Absolute stereochemistry.

RN 363164-95-8 CAPLUS CN β -D-Glucopyranoside, 4-[(4-methylphenyl)methyl]-2- (phenylmethyl)phenyl (CA INDEX NAME)

Absolute stereochemistry.

RN 363164-96-9 CAPLUS CN β -D-Glucopyranoside, 4-chloro-2-[(5-chloro-2-hydroxyphenyl)methyl]phenyl (CA INDEX NAME)

RN 363164-97-0 CAPLUS

CN β -D-Glucopyranoside, 2-bromo-4-chloro-6-(phenylmethyl)phenyl (CA INDEX NAME)

Absolute stereochemistry.

RN 363164-98-1 CAPLUS

CN β -D-Glucopyranoside, 2,4-dibromo-6-(phenylmethyl)phenyl (CA INDEX NAME)

Absolute stereochemistry.

RN 363164-99-2 CAPLUS

CN β -D-Glucopyranoside, 2-[(2,4-dichlorophenyl)methyl]-4-(1,1,3,3-tetramethylbutyl)phenyl (CA INDEX NAME)

RN 363165-00-8 CAPLUS

CN β -D-Glucopyranoside, 5-methoxy-2-(phenylmethyl)phenyl (CA INDEX NAME)

Absolute stereochemistry.

RN 363165-01-9 CAPLUS

CN β -D-Glucopyranoside, 5-methoxy-2-[(4-methylphenyl)methyl]phenyl (CA INDEX NAME)

Absolute stereochemistry.

RN 363165-02-0 CAPLUS

CN β -D-Glucopyranoside, 2-(phenylmethyl)-5-propoxyphenyl (CA INDEX NAME)

Absolute stereochemistry.

RN 363165-03-1 CAPLUS CN β -D-Glucopyranoside, 5-methyl-2-(phenylmethyl)phenyl (CA INDEX NAME)

Absolute stereochemistry.

RN 363165-04-2 CAPLUS CN β -D-Glucopyranoside, 5-chloro-2-(phenylmethyl)phenyl (CA INDEX NAME)

Absolute stereochemistry.

RN 363165-05-3 CAPLUS CN β -D-Glucopyranoside, 2-chloro-6-(phenylmethyl)phenyl (CA INDEX NAME)

RN 363165-06-4 CAPLUS

CN β -D-Glucopyranoside, 2-methyl-6-[[4-(methylthio)phenyl]methyl]phenyl (CA INDEX NAME)

Absolute stereochemistry.

RN 363165-07-5 CAPLUS

CN β -D-Glucopyranoside, 2-[(4-hydroxyphenyl)methyl]-6-methylphenyl (CA INDEX NAME)

Absolute stereochemistry.

RN 363165-08-6 CAPLUS

CN β -D-Glucopyranoside, 2-methyl-6-[(4-methylphenyl)methyl]phenyl (CA INDEX NAME)

RN 363165-09-7 CAPLUS CN β -D-Glucopyranoside, 2-methyl-6-[[4-(methylsulfonyl)phenyl]methyl]phenyl (CA INDEX NAME)

Absolute stereochemistry.

RN 363165-28-0 CAPLUS CN β -D-Glucopyranoside, 2-(3-thienylmethyl)phenyl (CA INDEX NAME)

RN 363165-30-4 CAPLUS

CN β -D-Glucopyranoside, 3-methyl-2-[(4-methylphenyl)methyl]phenyl (CA INDEX NAME)

Absolute stereochemistry.

RN 363165-31-5 CAPLUS

CN β -D-Glucopyranoside, 2-[(4-ethylphenyl)methyl]-3-methylphenyl (CA INDEX NAME)

Absolute stereochemistry.

RN 363165-32-6 CAPLUS

CN β -D-Glucopyranoside, 2-[(4-chlorophenyl)methyl]-3-methylphenyl (CA INDEX NAME)

RN 363165-33-7 CAPLUS

CN β -D-Glucopyranoside, 3-methyl-2-[[4-(methylthio)phenyl]methyl]phenyl (CA INDEX NAME)

Absolute stereochemistry.

RN 363165-34-8 CAPLUS

CN β -D-Glucopyranoside, 2-[(4-methoxyphenyl)methyl]-3-methylphenyl (CA INDEX NAME)

Absolute stereochemistry.

RN 363165-35-9 CAPLUS

CN β -D-Glucopyranoside, 2-[(4-hydroxyphenyl)methyl]-3-methylphenyl (CA INDEX NAME)

Absolute stereochemistry.

RN 363165-36-0 CAPLUS CN β -D-Glucopyranoside, 3-methyl-2-[[4-(methylsulfonyl)phenyl]methyl]phenyl (CA INDEX NAME)

Absolute stereochemistry.

RN 363165-37-1 CAPLUS CN β -D-Glucopyranoside, 3-methyl-2-[[4-(trifluoromethoxy)phenyl]methyl]p henyl (CA INDEX NAME)

RN 363165-38-2 CAPLUS CN β -D-Glucopyranoside, 3-methyl-2-[[4-(trifluoromethyl)phenyl]methyl]phenyl (CA INDEX NAME)

Absolute stereochemistry.

RN 363165-39-3 CAPLUS CN Ethanone, $1-[4-[[2-(\beta-D-glucopyranosyloxy)-6-methylphenyl]methyl]phenyl]- (CA INDEX NAME)$

Absolute stereochemistry.

RN 363165-40-6 CAPLUS

CN β -D-Glucopyranoside, 2-[[4-(hydroxymethyl)phenyl]methyl]-3-methylphenyl (CA INDEX NAME)

Absolute stereochemistry.

RN 363165-41-7 CAPLUS

CN β -D-Glucopyranoside, 2-[[4-(difluoromethoxy)phenyl]methyl]-3-methylphenyl (CA INDEX NAME)

Absolute stereochemistry.

RN 363165-42-8 CAPLUS

CN β -D-Glucopyranoside, 2-[(4-ethylphenyl)methyl]-6-methylphenyl (CA INDEX NAME)

RN 363165-43-9 CAPLUS

CN β -D-Glucopyranoside, 2-[[4-(difluoromethoxy)phenyl]methyl]-6-methylphenyl (CA INDEX NAME)

Absolute stereochemistry.

RN 363165-44-0 CAPLUS

CN β -D-Glucopyranoside, 2-methyl-6-(phenylmethyl)phenyl (CA INDEX NAME)

Absolute stereochemistry.

RN 363165-45-1 CAPLUS

CN β -D-Glucopyranoside, 2-[(4-chlorophenyl)methyl]-6-methylphenyl (CA INDEX NAME)

RN 363165-46-2 CAPLUS CN Ethanone, 1-[4-[[2-(β -D-glucopyranosyloxy)-3-methylphenyl]methyl]phenyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 363165-47-3 CAPLUS CN β -D-Glucopyranoside, 2-[[4-(hydroxymethyl)phenyl]methyl]-6-methylphenyl (CA INDEX NAME)

Absolute stereochemistry.

RN 363165-48-4 CAPLUS CN β -D-Glucopyranoside, 2-methyl-6-[[4-(trifluoromethoxy)phenyl]methyl]p

henyl (CA INDEX NAME)

Absolute stereochemistry.

RN 363165-49-5 CAPLUS

CN β -D-Glucopyranoside, 2-[(4-methoxyphenyl)methyl]-6-methylphenyl (CA INDEX NAME)

Absolute stereochemistry.

RN 363165-50-8 CAPLUS

CN Ethanone, 1-[4-[[2-(β -D-glucopyranosyloxy)phenyl]methyl]phenyl]- (CA INDEX NAME)

RN 363165-51-9 CAPLUS

CN β -D-Glucopyranoside, 2-[[4-(hydroxymethyl)phenyl]methyl]phenyl (CA INDEX NAME)

Absolute stereochemistry.

RN 363165-52-0 CAPLUS

CN β -D-Glucopyranoside, 2-[[4-(difluoromethoxy)phenyl]methyl]phenyl (CA INDEX NAME)

Absolute stereochemistry.

RN 363165-53-1 CAPLUS

CN $\beta\text{-D-Glucopyranoside, 2-(2-pyridinylmethyl)phenyl (CA INDEX NAME)}$ Absolute stereochemistry.

RN 363165-54-2 CAPLUS CN $\beta\text{-D-Glucopyranoside, 2-(3-pyridinylmethyl)phenyl (CA INDEX NAME)}$ Absolute stereochemistry.

RN 363165-55-3 CAPLUS CN β -D-Glucopyranoside, 2-(2-oxazolylmethyl)phenyl (CA INDEX NAME) Absolute stereochemistry.

RN 363165-56-4 CAPLUS

CN β -D-Glucopyranoside, 2-(2-thiazolylmethyl)phenyl (CA INDEX NAME)

Absolute stereochemistry.

RN 363165-57-5 CAPLUS

CN β -D-Glucopyranoside, 2-(2-benzothiazolylmethyl)phenyl (CA INDEX NAME)

Absolute stereochemistry.

RN 363165-58-6 CAPLUS

CN β -D-Glucopyranoside, 2-(3-quinolinylmethyl)phenyl (CA INDEX NAME)

RN 363165-59-7 CAPLUS

CN β -D-Glucopyranoside, 3-methyl-2-(2-oxazolylmethyl)phenyl (CA INDEX NAME)

Absolute stereochemistry.

RN 363165-60-0 CAPLUS

CN β -D-Glucopyranoside, 2-methyl-6-(2-thiazolylmethyl)phenyl (CA INDEX NAME)

RN 363165-61-1 CAPLUS
CN β-D-Glucopyranoside, 2-methyl-6-(2-oxazolylmethyl)pl

Absolute stereochemistry.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 36 OF 56 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2001:693332 CAPLUS

DOCUMENT NUMBER: 135:242456

TITLE: Preparation of (2-glucopyranosyloxybenzyl)benzene

derivatives, medicinal compositions containing the same and intermediates for the preparation of the

derivatives

INVENTOR(S): Fujikura, Hideki; Fushimi, Nobuhiko; Nishimura,

Toshihiro; Tatani, Kazuya; Katsuno, Kenji; Hiratochi,

Masahiro; Tokutake, Yoshiki; Isaji, Masayuki

PATENT ASSIGNEE(S): Kissei Pharmaceutical Co., Ltd., Japan

SOURCE: PCT Int. Appl., 47 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATEN'	PATENT NO.				KIND DATE			APPLICATION NO.							DATE		
WO 20 W	CO, HR, LT, RU,	AG, CR, HU, LU,	AL, CU, ID, LV, SE,	CZ, IL, MA, SG,	AT, DE, IN, MD,	DK, IS, MG,	AZ, DM, JP, MK,	BA, DZ, KE, MN,	BI EI KO MV	B, E E, E G, k	BG, ES, KP, MX,	BR, FI, KR, MZ,	BY, GB, KZ, NO,	GD, LC, NZ,	CA GE LK PL	20010 , CH, , GH, , LR, , PT,	CN, GM, LS, RO,
	W: GH, DE, BJ,	GM, DK,	KE, ES,	LS, FI, CI,	FR, CM,	GB, GA,	GR, GN,	IE, GW,	II MI	Γ, Ι Ξ, Ν	LU, MR,	MC, NE,	NL, SN,	PT,	SE. TG	TR,	BF,
AU 20 TR 20 BR 20 EP 12	2001003323			A1 20010920 A 20010924 T2 20021223 A 20021224 A1 20030102 B1 20051207			CA 2001-2402609 AU 2001-41146 TR 2002-2200 BR 2001-9323 EP 2001-912380						20010315 20010315 20010315 20010315 20010315				
R HU 20 HU 20	: AT, IE, 030000	SI, 57 57	LT,	DE, LV, A2	DK, FI,	ES, RO, 2003 2003	FR, MK, 0528 0929	CY,	AI HU	200	ΓR 03-5	ō7			,	, MC, 20010	315
NZ 52 RU 22 AT 31 JP 37 ES 22	54340 2114 73450			A C2 T B2 T3		2004 2005 2005 2006 2006	0620 1215 0510		RU AT JP	200 200 200	02-1 01-9 01-9	5213(1248) 9123(5677)	80 50		4	20010 20010 20010 20010 20010	315 315 315
AU 20 BG 10 MX 20 NO 20	AU 2001241146 BG 107102 MX 2002PA09034 NO 2002004424			B2 20060629 A 20030430 A 20030910 A 20021118				AU 2001-241146 BG 2002-1071 MX 2002-PA9034 NO 2002-4424						20010315 20020913 20020913 20020916			
IN 20 US 20 HK 10 US 20	020074 02DN00 040053	902 855 294		B1 A A A1 A1 A1		2007 2003 2005 2004 2005 2005 2005	0916 0121 0318 0429 0407		IN US HK US	200 200 200 200	02-I 02-2 03-1 04-9	7418 DN902 2218 10829 9595	2 43 97 09			20020 20020 20021 20031 20041 20041	916 230 114 007
JP 20 IN 20	US 7045665 JP 2006143735 IN 2006DN02937 PRIORITY APPLN. INFO.:					2006 2006 2007	0608		IN JP JP	200 200 200	06-I 00-1 01-5	ON29	4 50		A 2 A3 2	20051 20060 20000 20010 20010	522 317 315

OTHER SOURCE(S): GΙ

MARPAT 135:242456

Ι

AΒ $[2-(\beta-D-Glucopyranosyloxy)]$ benzyl] benzene derivs. of the general formula (I; wherein R1 is hydrogen or hydroxylated lower alkyl; R2 is lower alkyl, lower alkoxy, lower alkylthio, hydroxylated lower alkyl, hydroxylated lower alkoxy, hydroxylated lower alkylthio, or the like.) and salts thereof and intermediates for the preparation of the derivs. are prepared Theses compds. exhibit excellent human sodium-dependent glucose-transporter (SGLT2)-inhibiting activity and are useful as preventive or therapeutic drugs for diseases caused by hyperglycemia such as diabetes, diabetes complications, and obesity. Thus, a solution of 5-acetoxymethyl-2-(4-ethylbenzyl)phenol and 2,3,4,6-tetra-0-acetyl-1-0trichloroacetimidoyl- α -D-glucopyranose was stirred in the presence of Et20.BF3 in CH2Cl2 at room temperature for 1 h to give 5-acetoxymethyl-2-(4ethylbenzyl)phenyl 2,3,4,6-tetra-O-acetyl- β -D-glucopyranoside which was stirred with NaOMe in MeOH at room temperature for 30 min to give 2-(4-ethylbenzyl)-5-hydroxymethylphenyl β -D-glucopyranoside (II). II in vitro showed IC50 of 8.1 nM for inhibiting the uptake of Me α -D-(U-14C)qlucopyranoside into COS-7 cells over-expressing human SGLT2 and in vivo at 1 mg/kg body weight i.v. promoted the urinary excretion of glucose in SD rats with 238.9 mg/200 g body weight ΙT 360775-96-8P 360775-97-9P 360775-98-0P 360775-99-1P 360776-00-7P 360776-01-8P 360776-02-9P 360776-03-0P 360776-04-1P 360776-05-2P 360776-06-3P 360776-07-4P RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation of (glucopyranosyloxybenzyl) benzene derivs. as SGLT2 inhibitors for treatment and/or prevention of diabetes, diabetes complications, and obesity) RN 360775-96-8 CAPLUS β -D-Glucopyranoside, 2-[(4-methoxyphenyl)methyl]phenyl (CA INDEX CN NAME)

RN 360775-97-9 CAPLUS

CN β -D-Glucopyranoside, 2-[(4-methylphenyl)methyl]phenyl (CA INDEX NAME)

Absolute stereochemistry.

RN 360775-98-0 CAPLUS

CN β -D-Glucopyranoside, 2-[(4-ethylphenyl)methyl]phenyl (CA INDEX NAME)

Absolute stereochemistry.

RN 360775-99-1 CAPLUS

CN β -D-Glucopyranoside, 2-[[4-(2-methylpropyl)phenyl]methyl]phenyl (CA

INDEX NAME)

Absolute stereochemistry.

RN 360776-00-7 CAPLUS

CN β -D-Glucopyranoside, 2-[(4-ethoxyphenyl)methyl]phenyl (CA INDEX NAME)

Absolute stereochemistry.

RN 360776-01-8 CAPLUS

CN β -D-Glucopyranoside, 2-[[4-(1-methylethoxy)phenyl]methyl]phenyl (CA INDEX NAME)

RN 360776-02-9 CAPLUS CN β -D-Glucopyranoside, 5-(hydroxymethyl)-2-[(4-propoxyphenyl)methyl]phenyl (CA INDEX NAME)

Absolute stereochemistry.

RN 360776-03-0 CAPLUS CN β -D-Glucopyranoside, 2-[(4-ethylphenyl)methyl]-5-(hydroxymethyl)phenyl (CA INDEX NAME)

Absolute stereochemistry.

RN 360776-04-1 CAPLUS

CN β -D-Glucopyranoside, 5-(hydroxymethyl)-2-[[4-(hydroxymethyl)phenyl]methyl]phenyl (CA INDEX NAME)

Absolute stereochemistry.

RN 360776-05-2 CAPLUS

CN β -D-Glucopyranoside, 2-[[4-(2-hydroxyethyl)phenyl]methyl]phenyl (CA INDEX NAME)

Absolute stereochemistry.

RN 360776-06-3 CAPLUS

CN β -D-Glucopyranoside, 2-[[4-(3-hydroxypropyl)phenyl]methyl]phenyl (CA INDEX NAME)

RN 360776-07-4 CAPLUS

CN β -D-Glucopyranoside, 2-[[4-(ethylthio)phenyl]methyl]phenyl (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT:

11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 37 OF 56 CAPLUS COPYRIGHT 2008 ACS on STN T.4

2001:502694 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 135:301038

TITLE: Benzophenone O-glucoside, a biogenic precursor of 1,3,7-trioxygenated xanthones in Hypericum annulatum

AUTHOR(S): Kitanov, G. M.; Nedialkov, P. T.

CORPORATE SOURCE: Faculty of Pharmacy, Department of Pharmacognosy, Medical University of Sofia, Sofia, 1000, Bulg.

SOURCE: Phytochemistry (2001), 57(8), 1237-1243

CODEN: PYTCAS; ISSN: 0031-9422

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal LANGUAGE: English

GΙ

AΒ Two benzophenones, hypericophenonoside (I) and 2,3',5',6-tetrahydroxy-4methoxybenzophenone (annulatophenone, II) were isolated from aerial parts of Hypericum annulatum. Acid and enzymic hydrolysis of I has led directly to the formation of 1,3,7-trihydroxyxanthone (gentisein).

ΙT 366493-03-0P, Hypericophenonoside RL: BOC (Biological occurrence); BSU (Biological study, unclassified); PRP (Properties); PUR (Purification or recovery); BIOL (Biological study);

OCCU (Occurrence); PREP (Preparation) (benzophenone O-glucoside from Hypericum annulatum)

RN 366493-03-0 CAPLUS

CN Methanone, $[2-(\beta-D-glucopyranosyloxy)-5-hydroxyphenyl](2,4,6$ trihydroxyphenyl) - (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 38 OF 56 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2001:457038 CAPLUS

DOCUMENT NUMBER: 135:192860

TITLE: Three Xanthones and a Benzophenone from Garcinia

mangostana

AUTHOR(S): Huang, Yu-Ling; Chen, Chien-Chih; Chen, Ying-Jen;

Huang, Ray-Ling; Shieh, Bor-Jinn

CORPORATE SOURCE: National Research Institute of Chinese Medicine,

Taipei, Taiwan

SOURCE: Journal of Natural Products (2001), 64(7), 903-906

CODEN: JNPRDF; ISSN: 0163-3864

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal LANGUAGE: English

GΙ

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Investigation of the constituents of Garcinia mangostana has led to the isolation of four new compds.: three minor xanthones, garcimangosone A (I), garcimangosone B (II), and garcimangosone C (III), and a benzophenone glucoside, garcimangosone D (IV). The structures of these four compds. were established by spectral (NMR and MS) and chemical methods.

IT 356055-68-0P

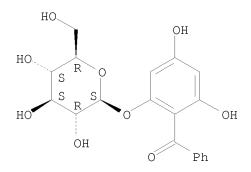
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); PRP (Properties); PUR (Purification or recovery); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation)

(three xanthones and a benzophenone from Garcinia mangostana)

RN 356055-68-0 CAPLUS

CN Methanone, [2-(β -D-glucopyranosyloxy)-4,6-dihydroxyphenyl]phenyl-(CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 39 OF 56 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2000:658751 CAPLUS

DOCUMENT NUMBER: 133:360824

TITLE: Benzophenone glycosides from Gnidia involucrata

AUTHOR(S): Ferrari, J.; Terreaux, C.; Sahpaz, S.; Msonthi, J. D.;

Wolfender, J.-L.; Hostettmann, K.

CORPORATE SOURCE: Institut de Pharacognosie et Phytochimie, BEP,

Universite de Lausanne, Lausanne, CH-1015, Switz.

SOURCE: Phytochemistry (2000), 54(8), 883-889

CODEN: PYTCAS; ISSN: 0031-9422

Ι

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal LANGUAGE: English

GΙ

AB Six compds. have been isolated from the methanol extract of the aerial parts of Gnidia involucrata (Thymelaeaceae). They were identified as 2,3,4',5,6-pentahydroxybenzophenone-4-C-glucoside (I) and 2,4',6-trihydroxy-4-methoxybenzophenone-2-O-glucoside (II), together with mangiferin, kaempferol-3-O-glucoside, yuankanin and manniflavanone by chemical and spectroscopic means. The structures of three addnl. C-glycosyl flavones - vitexin, isovitexin and isoorientin - were determined online by LC/UV/APCI-MSn anal. of the crude extract

IT 307502-06-3P

RL: BOC (Biological occurrence); BSU (Biological study, unclassified); PRP (Properties); PUR (Purification or recovery); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation)

(benzophenone glycosides from Gnidia involucrata)

RN 307502-06-3 CAPLUS

CN Methanone, [2-(β -D-glucopyranosyloxy)-6-hydroxy-4-methoxyphenyl](4-hydroxyphenyl)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

27

REFERENCE COUNT:

THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 40 OF 56 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2000:590833 CAPLUS

DOCUMENT NUMBER: 133:307551

TITLE: Flavonoid and benzophenone glycosides from Coleogyne

ramosissima

AUTHOR(S): Ito, H.; Nishitani, E.; Konoshima, T.; Takasaki, M.;

Kozuka, M.; Yoshida, T.

CORPORATE SOURCE: Fac. Pharm. Sci., Okayama Univ., Tsushima, Okayama,

700-8530, Japan

SOURCE: Phytochemistry (2000), 54(7), 695-700

CODEN: PYTCAS; ISSN: 0031-9422

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal LANGUAGE: English

GΙ

AB A benzophenone glucoside and two flavonol glycosides were isolated together with 27 known polyphenols from the aerial parts of Coleogyne ramosissima, and their structures were elucidated by spectroscopic and chemical methods as iriflophenone 2-0- β -glucopyranoside (I), isorhamnetin 3-0-2G-rhamnopyranosylrutinoside-7-0- α -rhamnopyranoside and limocitrin 3-0-rutinoside-7-0- β -glucopyranoside, resp.

IT 245447-83-0P

RL: BOC (Biological occurrence); BSU (Biological study, unclassified); PRP (Properties); PUR (Purification or recovery); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation)

(from Coleogyne ramosissima)

Ι

RN 245447-83-0 CAPLUS

CN Methanone, $[2-(\beta-D-glucopyranosyloxy)-4,6-dihydroxyphenyl]$ (4-hydroxyphenyl)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

REFERENCE COUNT:

24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 41 OF 56 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2000:556704 CAPLUS

DOCUMENT NUMBER: 133:263862

TITLE: Phenolic glycosides from the leaves of Alangium

platanifolium var. platanifolium

AUTHOR(S): Tamaki, Akie; Ide, Toshinori; Otsuka, Hideaki
CORPORATE SOURCE: Institute of Pharmaceutical Sciences, Hiroshima
University School of Medicine, Hiroshima, 734-8551,

Japan

SOURCE: Journal of Natural Products (2000), 63(10), 1417-1419

CODEN: JNPRDF; ISSN: 0163-3864

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal LANGUAGE: English

GΙ

AB Chemical investigation of Alangium platanifolium var. platanifolium has resulted in the isolation of nine phenolic glycosides that were identified by means of 1D and 2D NMR expts. Among them, catechol and salicinol O- and $1-O-\beta-D-(6-O-\beta-D-apiofuranosyl)$ glucopyranosides, and two compds. characterized as adducts of 2,6-dihydroxybenzoic acid with salicin (plataplatanoside, I) and 4-hydroxysalicin (4-hydroxyalangifolioside, II) were determined structurally as new compds.

IT 125574-31-4, Alangifolioside

RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)

(from Alangium platanifolium var. platanifolium)

RN 125574-31-4 CAPLUS

CN Benzoic acid, $3-[[2-(\beta-D-glucopyranosyloxy)phenyl]methyl]-2,6-dihydroxy- (CA INDEX NAME)$

IT 297163-45-2P

RL: BOC (Biological occurrence); BSU (Biological study, unclassified); PRP (Properties); PUR (Purification or recovery); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation)

(phenolic glycosides from Alangium platanifolium var. platanifolium)

RN 297163-45-2 CAPLUS

CN Benzoic acid, $3-[[2-(\beta-D-glucopyranosyloxy)-5-hydroxyphenyl]methyl]-2,6-dihydroxy- (CA INDEX NAME)$

Absolute stereochemistry. Rotation (-).

6

REFERENCE COUNT:

THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 42 OF 56 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1999:536082 CAPLUS

DOCUMENT NUMBER: 131:266577

TITLE: Anti-tumor promoting activity of polyphenols from

Cowania mexicana and Coleogyne ramosissima

AUTHOR(S): Ito, Hideyuki; Miyake, Masateru; Nishitani, Eisei;

Mori, Kazuko; Hatano, Tsutomu; Okuda, Takuo;

Konoshima, Takao; Takasaki, Midori; Kozuka, Mutsuo; Mukainaka, Teruo; Tokuda, Harukuni; Nishino, Hoyoku;

Yoshida, Takashi

CORPORATE SOURCE: Faculty of Pharmaceutical Sciences, Okayama

University, Tsushima, 700-8530, Japan

SOURCE: Cancer Letters (Shannon, Ireland) (1999), 143(1), 5-13

CODEN: CALEDQ; ISSN: 0304-3835

PUBLISHER: Elsevier Science Ireland Ltd.

DOCUMENT TYPE: Journal LANGUAGE: English

Chemical investigation on polyphenol-rich fractions of Cowania mexicana and Coleogyne ramosissima (Rosaceae) which showed significant inhibitory effects on Epstein-Barr virus early antigen (EBV-EA) activation induced by 12-O-tetradecanoylphorbol-13-acetate (TPA), has led to the characterization of 10 compds. including C-glucosidic ellagitannin monomers and dimers from the former plant, and 17 polyphenols including flavonoid glycosides from the latter. The effects of individual components and their analogs with related structures on the TPA-induced EBV-EA activation were then evaluated. Among the compds. isolated from C. mexicana, two C-glucosidic ellagitannins, alienanin B and stenophyllanin A and a nitrile glucoside (lithospermoside), and among the constituents from C. ramosissima, two flavonoid glycosides, isorhamnetin $3-O-\beta-D$ -glucoside and narcissin were revealed to possess strong inhibitory effects on EBV-EA activation, the potencies of which were either comparable to or stronger than that of a green tea polyphenol, (-)-epigallocatechin gallate. These polyphenols except for nitrile glucoside, which was not tested owing to an insufficient amount, were also found to exhibit anti-tumor promoting activity in two-stage mouse skin carcinogenesis using 7,12-dimethylbenz[a]anthracene (DMBA) and TPA.

IT 245447-83-0P

RL: BAC (Biological activity or effector, except adverse); BOC (Biological occurrence); BSU (Biological study, unclassified); PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation); USES (Uses)

RN 245447-83-0 CAPLUS

CN Methanone, $[2-(\beta-D-glucopyranosyloxy)-4,6-dihydroxyphenyl]$ (4-hydroxyphenyl)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

28

REFERENCE COUNT:

THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 43 OF 56 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1999:519864 CAPLUS

DOCUMENT NUMBER: 132:134724

TITLE: Acetophenone derivatives from Euphorbia ebracteolata

Hayata

AUTHOR(S): Wang, Wenxiang; Ding, Xingbao

CORPORATE SOURCE: Institute of Materia Medica, Shandong Academy of Medical Sciences, Jinan, 250062, Peop. Rep. China

SOURCE: Yaoxue Xuebao (1999), 34(7), 514-517

CODEN: YHHPAL; ISSN: 0513-4870

PUBLISHER: Yaoxue Xuebao Bianjibu

DOCUMENT TYPE: Journal LANGUAGE: Chinese

AB Acetophenone derivs. from Euphorbia ebracteolata Hayata were isolated and purified with silica gel chromatog., and their chemical structures were identified by their physicochem. properties and spectral data. Five acetophenone derivs. were isolated from the plant as the following: 2,4-dihydroxy-6-methoxy-3-methylacetophenone (1), 3,3'-diacetyl-4,4'-dimethoxy-2,2',6,6'-tetrahydroxy diphenylmethane, 3,3'-diacetyl-4,4'-dimethoxy-2,2',6,6'-tetrahydroxy diphenylmethane-6'-O- β -D-glucopyranoside (3), 2,4-dihydroxy-6-methoxy-3-methylacetophenone-4-O- β -D-glucopyranoside (4), and 2,4-dihydroxy-6-methoxy-3-methylacetophenone-4-O- β -D-xylopyranosyl(1 \rightarrow 6)- β -D-glucopyranoside (5). Compds. 3 and 5 were named ebractelatinoside B and ebractelatinoside C resp.

IT 256653-66-4P, Ebractelatinoside B

RL: PUR (Purification or recovery); PREP (Preparation) (acetophenone derivs. from Euphorbia ebracteolata Hayata)

RN 256653-66-4 CAPLUS

CN Ethanone, $1-[3-[(3-acetyl-2,6-dihydroxy-4-methoxyphenyl)methyl]-4-(\beta-D-glucopyranosyloxy)-2-hydroxy-6-methoxyphenyl]- (CA INDEX NAME)$

ANSWER 44 OF 56 CAPLUS COPYRIGHT 2008 ACS on STN T.4

ACCESSION NUMBER: 1998:678817 CAPLUS

DOCUMENT NUMBER: 130:60589

Inhibitory effect of lichen metabolites and their TITLE:

synthetic analogs on melanin biosynthesis in cultured

B-16 mouse melanoma cells

AUTHOR(S): Matubara, H.; Miharu, K.; Kinoshita, K.; Koyama, K.;

Ye, Yang; Takahashi, K.; Yoshimura, I.; Yamamoto, Y.;

Miura, Y.; Kinoshita, Y.

CORPORATE SOURCE: Nippon Paint Co. Ltd., Neyagawa, 572, Japan SOURCE:

Natural Product Sciences (1998), 4(3), 161-169

CODEN: NPSCFB; ISSN: 1226-3907

PUBLISHER: Korean Society of Pharmacognosy

DOCUMENT TYPE: Journal LANGUAGE: English

The analogs of lichen components showing anti-tyrosinase activities were AR synthesized. 4-Alkylresorcinol derivs. showed both the inhibitory activity and inhibition of B-16 melanoma cells at 10 mM to 1.2 mM.

Resorcinol and 4-methylresorcinol showed the inhibitory effect with a low

cytotoxicity at the doses of 2.5 mM and 600 μM among

4-alkylresorcinols, resp. Some diphenylmethane derivs. had strong activities with a low cytotoxicity. While xanthene derivs. had no effect.

Glucosides of 4,5-alkylresorcinol and diphenylmethane derivative were prepared to cytotoxicity was examined; no effect was found. Liposome of

diphenylmethane derivative was prepared for the same purpose, and the latter showed a remarkable effect at 15 μM with a low cytotoxicity.

197307-51-0P ΙT

> RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(preparation and inhibitory effect of lichen metabolites and their synthetic analogs on melanin biosynthesis in cultured B-16 mouse melanoma cells)

197307-51-0 CAPLUS RN

CN α -D-Glucopyranoside, 2-[(2,6-dihydroxy-4-pentylphenyl)methyl]-3hydroxy-5-pentylphenyl (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 45 OF 56 CAPLUS COPYRIGHT 2008 ACS on STN T.4

ACCESSION NUMBER: 1997:618655 CAPLUS

DOCUMENT NUMBER: 127:311371

ORIGINAL REFERENCE NO.: 127:60813a,60816a

Tyrosinase inhibitors comprising resorcin glycosides TITLE:

with improved water solubility and reduced

cytotoxicity

Matsubara, Hideki; Kinoshita, Yasuhiro; Yamamoto, INVENTOR(S):

Yoshikazu

PATENT ASSIGNEE(S): Nippon Paint Co., Ltd., Japan SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09241128	A	19970916	JP 1996-44991	19960301
PRIORITY APPLN. INFO.:			JP 1996-44991	19960301
OTHER SOURCE(S):	MARPAT	127:311371		

GΙ

- * STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY AVAILABLE VIA OFFLINE PRINT *
- Tyrosinase inhibitors comprise monoglycosides of resorcins I (R1 = C, C1-9AB alkyl, alkenyl) or II (R2 = C1-9 alkyl, alkenyl) or methylenebisresorcins III (R3-4 = H, C1-9 alkyl, alkenyl), IV (R3-4 = H, C1-9 alkyl, alkenyl), or V (R3-4 = H, C1-9 alkyl, alkenyl) in which ≥ 1 OH is glycosylated. The glycosides with improved water soluble are useful for skin-lightening cosmetics, antifouling paints, etc. Solubility of 5-pentylresorcinol- β -monoglucoside (preparation given) in 10 mg water was 20 mM, vs. 10 mM for 5-pentylresorcinol. 4-Pentylresorcinol- β monoglucoside showed 93.4% tyrosinase-inhibiting activity and 75.7% cytotoxicity in mouse B16 melanoma cell, vs. 96.3% cytotoxicity of 4-pentylresorcinol.

ΙT 197307-51-0P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); PNU (Preparation, unclassified); PRP (Properties); TEM (Technical or engineered material use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of resorcin glycosides as tyrosinase inhibitors with improved water solubility and reduced cytotoxicity)

RN 197307-51-0 CAPLUS

 α -D-Glucopyranoside, 2-[(2,6-dihydroxy-4-pentylphenyl)methyl]-3-CN hydroxy-5-pentylphenyl (CA INDEX NAME)

Me (CH₂) 4 OH OH HO OH
$$R$$
 S OH OH CH_2) 4 OH

L4 ANSWER 46 OF 56 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1997:357315 CAPLUS

DOCUMENT NUMBER: 127:66048

ORIGINAL REFERENCE NO.: 127:12631a, 12634a

TITLE: Synthesis of inhibitors of α -1,3-

fucosyltransferase

AUTHOR(S): Jefferies, Ian; Bowen, Benjamin R.

CORPORATE SOURCE: Central Research laboratories, Ciba Geigy PLC,

Cheshire, SK10 2NX, UK

SOURCE: Bioorganic & Medicinal Chemistry Letters (1997), 7(9),

1171-1174

CODEN: BMCLE8; ISSN: 0960-894X

PUBLISHER: Elsevier
DOCUMENT TYPE: Journal
LANGUAGE: English

GΙ

AB A new class of compds., e.g. I, structurally modified derivs. of the $\alpha-\text{fucosidase}$ inhibitor deoxyfuconojirimycin, has been prepared and found to display activity as inhibitors of $\alpha-1,3-\text{fucosyltransferase}$ in the μM range.

IT 191276-07-0P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(preparation of inhibitors of fucosyltransferase)

RN 191276-07-0 CAPLUS

CN β -D-Galactopyranoside, 2-[[(2S,3R,4S,5R)-3,4,5-trihydroxy-2-methyl-1-piperidinyl]methyl]phenyl (CA INDEX NAME)

REFERENCE COUNT:

17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 47 OF 56 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1992:630147 CAPLUS

DOCUMENT NUMBER: 117:230147

ORIGINAL REFERENCE NO.: 117:39709a,39712a

TITLE: Chemical studies on Mexican plants used in traditional

medicine. Part 24. A phenylstyrene from Hintonia

latiflora

AUTHOR(S): Mata, Rachel; Camacho, Maria del Rayo; Mendoza,

Sandra; Cruz, Maria del Carmen

CORPORATE SOURCE: Fac. Quim., Univ. Nac. Auton. Mexico, Mexico City,

04510, Mex.

SOURCE: Phytochemistry (1992), 31(9), 3199-201

CODEN: PYTCAS; ISSN: 0031-9422

DOCUMENT TYPE: Journal LANGUAGE: English

GΙ

AB A novel phenylstyrene, 6-O- β -D-glucopyranosyl-2,3',4'-trihydroxy-4-methoxy- α -phenylstyrene (I), and a new 4-phenylcoumarin, 5-O-(6''-acetyl- β -D-glucopyranosyl)-7',3',4'-trihydroxy-4-phenylcoumarin (II), were isolated from the stem bark of Hintonia latiflora. The proposed structures are based on spectroscopic and chemical grounds.

IT 144223-77-8

RL: PROC (Process)

(structure and isolation of, from Hintonia latiflora)

RN 144223-77-8 CAPLUS

CN β -D-Glucopyranoside, 2-[1-(3,4-dihydroxyphenyl)ethenyl]-3-hydroxy-5-methoxyphenyl (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

L4 ANSWER 48 OF 56 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1990:115723 CAPLUS

DOCUMENT NUMBER: 112:115723

ORIGINAL REFERENCE NO.: 112:19527a,19530a

TITLE: Alangifolioside, a diphenylmethylene derivative, and

other phenolics from the leaves of Alangium

platanifolium var. trilobum

CODEN: PYTCAS; ISSN: 0031-9422

AUTHOR(S): Otsuka, Hideaki; Yamasaki, Kazuo; Yamauchi, Tatsuo CORPORATE SOURCE: Sch. Med., Hiroshima Univ., Hiroshima, 734, Japan

SOURCE: Phytochemistry (1989), 28(11), 3197-200

DOCUMENT TYPE: Journal LANGUAGE: English

GΙ

AB From the methanolic extract of leaves of A. platanifolium trilobum, henryoside, 2,6-dihydroxybenzoic acid and alangigolioside (I), along with 5 known flavonol glycosides were isolated.

IT 125574-31-4, Alangifolioside
RL: BIOL (Biological study)

(from Alangium platanifolium trilobum, isolation and structure of)

RN 125574-31-4 CAPLUS

CN Benzoic acid, $3-[[2-(\beta-D-glucopyranosyloxy)phenyl]methyl]-2,6-dihydroxy- (CA INDEX NAME)$

L4 ANSWER 49 OF 56 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1989:530712 CAPLUS

DOCUMENT NUMBER: 111:130712

ORIGINAL REFERENCE NO.: 111:21807a,21810a

TITLE: Punarnavoside: a new antifibrinolytic agent from

Boerhaavia diffusa Linn

AUTHOR(S): Jain, G. K.; Khanna, N. M.

CORPORATE SOURCE: Cent. Drug Res. Inst., Lucknow, 226 001, India SOURCE: Indian Journal of Chemistry, Section B: Organic Chemistry Including Medicinal Chemistry (1989),

one with the control of the control

28B(2), 163-6

CODEN: IJSBDB; ISSN: 0376-4699

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 111:130712

GΙ

AB Punarnavoside (I), a new antifibrinolytic agent isolated from the roots of B. diffusa has been characterized as 2-glucopyrano-4-hydroxy-5-(p-hydroxyphenyl)-propionyldiphenylmethane by spectral anal. and chemical degradation Punarnavoside stopped IUCD-associated bleeding episodes in rhesus monkeys when fed orally at 25 mg/kg body weight for seven days.

Ι

IT 106009-02-3, Punarnavoside

RL: BIOL (Biological study)

(from Boerhaavia diffusa roots, isolation and structure and antifibrinolytic action of)

RN 106009-02-3 CAPLUS

CN β -D-Glucopyranoside, 5-hydroxy-4-[3-(4-hydroxyphenyl)-1-oxopropoxy]-2-(phenylmethyl)phenyl (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 122738-95-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and hydrolysis of)

RN 122738-95-8 CAPLUS

CN β -D-Glucopyranoside, 5-methoxy-4-[3-(4-methoxyphenyl)-1-oxopropoxy]-2-

(phenylmethyl)phenyl (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 122738-91-4P

RN 122738-91-4 CAPLUS

CN β -D-Glucopyranoside, 4,5-dihydroxy-2-(phenylmethyl)phenyl (CA INDEX NAME)

L4 ANSWER 50 OF 56 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1987:404328 CAPLUS

DOCUMENT NUMBER: 107:4328
ORIGINAL REFERENCE NO.: 107:799a,802a

TITLE: Biotransformation of a [14C-methyl]-2-

methylaminobenzophenone by plant cell cultures

AUTHOR(S): Baumert, A.; Rosza, Z.; Schliemann, W.; Lewis, J. R.;

Groeger, D.

CORPORATE SOURCE: Inst. Biochem. Pflanzen, Akad. Wiss. DDR, Halle/Saale,

DDR-4050, Ger. Dem. Rep.

SOURCE: Planta Medica (1987), 53(1), 90-2

CODEN: PLMEAA; ISSN: 0032-0943

DOCUMENT TYPE: Journal LANGUAGE: English

AB 2-[14C]Methylamino-2',4'-dimethoxy-6'-hydroxybenzophenone (I) was synthesized and administered to Ruta graveolens cell suspension cultures. I was not incorporated into acridone alkaloids but glucosylated. This reaction also takes place in cell suspension cultures of Adhatoda vasica and Peganum harmala.

IT 108567-59-5

RL: FORM (Formation, nonpreparative)

(formation of, from methylaminobenzophenone, by plant cell cultures)

RN 108567-59-5 CAPLUS

CN Methanone, $[2-(\beta-D-glucopyranosyloxy)-4,6-dimethoxyphenyl][2-(methylamino)phenyl]- (CA INDEX NAME)$

L4 ANSWER 51 OF 56 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1987:38534 CAPLUS

DOCUMENT NUMBER: 106:38534

ORIGINAL REFERENCE NO.: 106:6357a,6360a

TITLE: Estimation of punarnavoside, a new antifibrinolytic

compound from Boerhaavia diffusa

AUTHOR(S): Seth, R. K.; Khanna, Madhu; Chaudhary, M.; Singh, S.;

Sarin, J. P. S.

CORPORATE SOURCE: Div. Pharm., Cent. Drug Res. Inst., Lucknow, India

SOURCE: Indian Drugs (1986), 23(10), 583-4

CODEN: INDRBA; ISSN: 0019-462X

DOCUMENT TYPE: Journal LANGUAGE: English

AB Punarnavoside (I) [106009-02-3] was determined in liquid exts. of Punarnava and in B. diffusa roots by TLC and spectrophotometry at 285 nm. MeOH-CHCl3-AcOH-benzene (3:17:0.4:2) was used as the mobile phase. Beer's law was obeyed in the concentration range 10-100 μg/mL. The I content in various samples of the liquid extract was 0.045-0.175%. The I content in the root samples was 0.032-0.045%. Recovery was 96-103%. The I content remained constant for 18 mo when stored at room temperature later decreasing

remained constant for 18 mo when stored at room temperature, later decreasing

and

showing 40-50% of the initial content in 6 mo.

IT 106009-02-3

RL: ANT (Analyte); ANST (Analytical study)

(determination of, in Boerhaavia diffusa roots and in liquid prepns. by TLC

and

spectrophotometry)

RN 106009-02-3 CAPLUS

CN β -D-Glucopyranoside, 5-hydroxy-4-[3-(4-hydroxyphenyl)-1-oxopropoxy]-2- (phenylmethyl)phenyl (9CI) (CA INDEX NAME)

L4 ANSWER 52 OF 56 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1981:481409 CAPLUS

DOCUMENT NUMBER: 95:81409

ORIGINAL REFERENCE NO.: 95:13783a,13786a

TITLE: Attempts to react methylenediphenols with glucose

derivatives and to condense O-phenylglucoside

derivatives

AUTHOR(S): Kaemmerer, Hermann; Ritz, Juergen

CORPORATE SOURCE: Abt. Lehramtskanditaten/Fachber. Chem., Univ. Mainz,

Mainz, 6500, Fed. Rep. Ger.

SOURCE: Makromolekulare Chemie (1981), 182(5), 1351-61

CODEN: MACEAK; ISSN: 0025-116X

DOCUMENT TYPE: Journal LANGUAGE: German

Attempts to apply known methods of glucosidation to oligo[(hydroxyphenylene)methylene]s were not satisfactory. The reaction of 4,4'-dimethyl-2,2'-methylenediphenol with 2,3,4,6-tetra-0-acetyl- α -D-glucopyranosyl bromide gave a monoglucoside in 11% yield. A second attempt, the condensation of suitable 0-Ph glucoside derivs. was unsuccessful. From a series of 0-Ph glucosides only 4-(2,3,4,6-tetra-0-acetyl- α -D-glucopyranosyloxy)benzyl bromide could be condensed with 0-(4-hydroxymethylphenyl)-2,3,4,6-tetra-0-acetylglucopyranose to the corresponding diglucoside of 4,4'-oxydimethylenediphenol.

IT 78637-04-4P

RN 78637-04-4 CAPLUS

CN α -D-Glucopyranoside, 2-[(2-hydroxy-5-methylphenyl)methyl]-4-methylphenyl, diacetate (9CI) (CA INDEX NAME)

CM 1

CRN 78637-03-3 CMF C21 H26 O7

Absolute stereochemistry.

CM 2

CRN 64-19-7 CMF C2 H4 O2

L4 ANSWER 53 OF 56 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1975:98327 CAPLUS

DOCUMENT NUMBER: 82:98327

ORIGINAL REFERENCE NO.: 82:15709a,15712a

TITLE: Circular dichroism. LXVI. Chiroptical properties of

some mono- and polysubstituted phenyl glycosides

AUTHOR(S): Levai, Albert; Liptak, Andras; Pinter, Istvan;

Snatzke, Guenther

CORPORATE SOURCE: Ruhr-Univ. Bochum, Bochum, Fed. Rep. Ger.

SOURCE: Acta Chimica Academiae Scientiarum Hungaricae (1975),

84(1), 99-107

CODEN: ACASA2; ISSN: 0001-5407

DOCUMENT TYPE: Journal LANGUAGE: English

AB The substitution pattern of the aryl ring for Ph glycosides generally did not influence the sign of the Cotton effects as long as the substituents were not strong perturbers. Both the 1B2u and the 1B1u band CD are neg.

for $\beta\text{-glycosides}$ and pos. for $\alpha\text{-glycosides}$. Steric and/or

electronic effects of ortho substituted compds. may change the sign of

some CD bands of the aromatic chromophore.

IT 55325-19-4

RL: PROC (Process)

(circular dichroism studies of)

RN 55325-19-4 CAPLUS

CN β -D-Glucopyranoside, 4-chloro-2-(phenylmethyl)phenyl (CA INDEX NAME)

L4 ANSWER 54 OF 56 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1975:58057 CAPLUS

DOCUMENT NUMBER: 82:58057

ORIGINAL REFERENCE NO.: 82:9295a,9298a

TITLE: Chemistry and biochemistry of plant constituents.

XXXIV. C-Benzoylation of 2', 4'-dihydroxyacetophenone

glycosides with 4-formyl-1,2-phenylene dibenzoate Reichel, Ludwig; Proksch. Gerhard; Tobien, Gerda

AUTHOR(S): Reichel, Ludwig; Proksch. Gerhard; Tobien, Gerda CORPORATE SOURCE: Sekt. Chem., Humboldt-Univ. Berlin, Berlin, Ger. Dem.

Rep.

SOURCE: Justus Liebigs Annalen der Chemie (1974), (10),

1709-12

CODEN: JLACBF; ISSN: 0075-4617

DOCUMENT TYPE: Journal LANGUAGE: German

GI For diagram(s), see printed CA Issue.

AB Reaction of the glycosides I (R = glucosyl or galactosyl, R1 = R2 = H) with the dibenzoate II gave the monobenzoyl derivs. I (R1 = COPh), the structure of which were proved by nitration yielding I (R = H, R1 = R2 = $\frac{1}{2}$

NO2) and I (R = H, R1 = COPh, R2 = NO2). IT 54917-83-8P 54918-25-1P

IT 54917-83-8P 54918-25-1P RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and nitration of)

RN 54917-83-8 CAPLUS

CN Ethanone, 1-[3-benzoyl-4-(β -D-galactopyranosyloxy)-2-hydroxyphenyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 54918-25-1 CAPLUS

CN Ethanone, 1-[3-benzoyl-4-(β -D-glucopyranosyloxy)-2-hydroxyphenyl]- (CA INDEX NAME)

L4 ANSWER 55 OF 56 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1959:89189 CAPLUS

DOCUMENT NUMBER: 53:89189
ORIGINAL REFERENCE NO.: 53:16049h

TITLE: A new acyl migration

AUTHOR(S): Reichel, Ludwig; Proksch, Gerhard

CORPORATE SOURCE: Humboldt Univ., Berlin

SOURCE: Naturwissenschaften (1958), 45, 491

CODEN: NATWAY; ISSN: 0028-1042

DOCUMENT TYPE: Journal LANGUAGE: Unavailable

AB Resacetophenone-4- β -D-glucoside (I) reacts with

dibenzoylprotocatechuic aldehyde at room temperature and in the presence of alkali to give 3-benzoyl derivative of I, m. 194-6°, $[\alpha]20D$

-88.8° (50% Me2CO), which with 1:1 concentrated HNO3 H2O gives 3-benzoyl-5-nitroresacetophenone, m. 114-18°, hydrolyzed with 10% NaOH to BzH and 5-nitroresacetophenone, m. 142°. The reaction mechanism is discussed.

IT 54918-25-1P, Benzophenone, 3-acetyl-6-(β -D-glucosyloxy)-2-

hydroxy-

RN 54918-25-1 CAPLUS

CN Ethanone, 1-[3-benzoyl-4-(β -D-glucopyranosyloxy)-2-hydroxyphenyl]- (CA INDEX NAME)

L4 ANSWER 56 OF 56 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1939:44193 CAPLUS

DOCUMENT NUMBER: 33:44193

ORIGINAL REFERENCE NO.: 33:6251i,6252a-b

TITLE: Action of triphenylchloromethane on α -methyl

D-mannopyranoside

AUTHOR(S): Watters, A. J.; Hockett, R. C.; Hudson, C. S.

SOURCE: Journal of the American Chemical Society (1939), 61,

1528-30

CODEN: JACSAT; ISSN: 0002-7863

DOCUMENT TYPE: Journal LANGUAGE: Unavailable

AB $\,$ $\alpha\text{-Me}$ D-mannopyranoside (5 g.) and Ph3CCl (10 g.) in 50 cc. C5H5N,

refluxed for 3 hrs., give 10 g. of the 6-trityl derivative (I), with 1 mole of

C5H5N, m. 101-2° (all m. ps. corrected), $[\alpha]$ D20 23.45°

(CHCl3, c 1.47); the CaCl2 complex, prepared in EtOH, m. 110-12°,

 $[\alpha]$ D20 26.6° (MeOH, c 1.04); it contains 2.5 moles of EtOH of

crystallization I (17.2 g.) and Ac2O in C6H5N at 0° (4 days) give 19.5 g.

of the 2,3,4-tri-Ac derivative, m. 130°, $[\alpha]D20$ 44.33°

(CHCl3, c 1.24); HBr in AcOH gives 2,3,4-triacetyl- α -methyl

D-mannopyranoside, m. 98°, $[\alpha]D20$ 55.54° (CHC13, c

1.14); MeI and Ag2O give a sirupy 6-Me derivative, which is hydrolyzed by 2%

HCl (90 min. on a boiling water bath) to 6-methyl D-mannose, $[\alpha]$ D20

15.3° (CHC13, c 1.13); PhNHNH2 in dilute AcOH gives

6-methylglucosazone. This series of reactions establishes the position of

the trityl group in I.

IT 910878-99-8P, Pyridine, compound with 6-trityl- α -

mannopyranoside

RL: PREP (Preparation)

(preparation of)

RN 910878-99-8 CAPLUS

CN Pyridine, compd. with 6-trityl- α -mannopyranoside (4CI) (CA INDEX

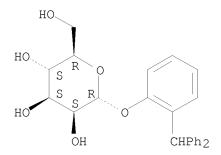
NAME)

CM 1

CRN 910878-98-7

CMF C25 H26 O6

Absolute stereochemistry.



CM 2

CRN 110-86-1

CMF C5 H5 N



=> d his

(FILE 'HOME' ENTERED AT 08:45:26 ON 01 JUL 2008)

FILE 'REGISTRY' ENTERED AT 08:45:58 ON 01 JUL 2008

L1 STRUCTURE UPLOADED

L2 7 S L1

L3 320 S L1 FULL

FILE 'CAPLUS' ENTERED AT 08:47:22 ON 01 JUL 2008

L4 56 S L3 FULL

=> log y

COST IN U.S. DOLLARS
SINCE FILE TOTAL
ENTRY SESSION
FULL ESTIMATED COST
314.80
493.83

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE TOTAL ENTRY SESSION CA SUBSCRIBER PRICE -44.80 -44.80

STN INTERNATIONAL LOGOFF AT 08:59:15 ON 01 JUL 2008